HOSPITAL ABSTRACTS

A MONTHLY SURVEY OF WORLD LITERATURE

PREPARED BY THE DEPARTMENT OF HEALTH

AND SOCIAL SECURITY

VOLUME 17, NO. 9, ABSTRACTS 1219-1373. SEPTEMBER 1977

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HOSPITAL ABSTRACTS

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HOSPITALS IN OTHER COUNTRIES

See also Abstract Nos. 1264, 1271, 1350

1219. Hospitalisation publique et hospitalisation privée: différenciation technique, économique et sociale. **[Public and private hospital care: technical, economic, and social differences.]** *Hôpital à Paris*, Paris, 1977, Jan./Feb., no. 37, pp. 33-51.

This article comprises extracts from a study from the Economics and Management of Health Organizations Laboratory based on a survey of 1,112 patients (540 in public hospitals and 572 in private clinics). The main finding which emerged was that the average stay was longer and cost more in the public hospital than in the clinic. Costs in hospital were equalised between all patients while in the private sector the patient paid for what he actually received. A selective mechanism appeared to operate in the private sector, the majority of their cases being patients requiring fairly major surgery. On the other hand very highly specialized surgery was done in the public hospital, and also a great deal of minor surgery, since the public hospital has a statutory duty to provide emergency services. More laboratory tests were carried out in the hospital than in the clinic. Patients in the higher socio-economic groups were more likely to use the clinic, and patients in this sector were in general more satisfied with the standards of care and treatment which they received than those in the public hospital. The underlying social and economic factors are briefly discussed.

1220. VEIL, S. Conférence de presse. **[Press conference.]** *Revue Hospitalière de France*, Paris, 1977, May, vol. 41, no. 301, pp. 419-446.

In the course of her press conference, the French Minister of Health and Social Security dealt with the following topics: expenditure on health, in particular on hospitals, and methods of reducing the deficit forecast for 1977; the replacement of out-dated hospital equipment; the Health Map; the hospital tariff; the role of the social security organizations in hospital management; the economics of health (assessment of the value of methods of diagnosis and treatment); involvement of medical staff in hospital management; hospital administrators (recruitment and duties); pharmaceutical products; the financial effects of road accidents; social security contributions by agricultural workers and active pensioners; cover for dental treatment; streamlining of the social security system; better information on contributions and cost of care; better monitoring of medical care (hospital profiles, medical profiles); reducing absenteeism; and changes in the regulations governing re-imbursement for certain types of drugs.

1221. Entwicklung der Krankenanstalten der Akutversorgung 1970 bis 1975. **[The development of hospitals for acute care, 1970-1975.]** *Österreichische Krankenhaus-Zeitung*, Wein, 1977, April, vol. 18, no. 4, pp. 215-216, 219-226, 229-235, 239-240.

Over the period 1970 to 1975 the number of beds in all Austrian hospitals increased by eight per cent to 82,936. Average length of stay fell from 21.95 to 20.42 days (14.49 days in acute hospitals) while bed occupancy fell from 88.4 to 84.7 per cent; the detailed tables give figures (for each of the six years 1970-1975) for number of beds by province; number of beds by specialty and type of hospital; average length of stay by specialty; bed occupancy rate by specialty; new projects by specialty; hospital provision by province; and future developments needed.

1222. HUSCHENBETH, I. Das Krankenhauswesen in der Bundesrepublik Deutschland im Spiegel der Statistik. **[A statistical survey of the hospital service in the Federal Republic of Germany.]** *Krankenhaus*, Stuttgart, 1977, March, vol. 69, no. 3, pp. 83-86.

Hospital statistics for Western Germany for 1975 are presented together with statistical tables showing developments since 1965. There are 3,481 hospitals (2,260 acute) of which 1,297 are publicly owned, 1,187 belong to charitable organizations and 997 are private. The total number of beds is 729,791 (489,756 acute). A table gives a breakdown of hospitals according to size: more than half of all beds are in hospitals with between 200 and 800 beds, and hospitals with more than 800 beds represent 3.5 per cent of all hospitals. There are 60,635 doctors (74 per cent more than in 1965) and 207,287 qualified nurses (90 per cent more than in 1965). In 1975 there were 10.4 million in-patients with an average length of stay of 22.2 days (16.7 days in acute hospitals, 60.8 days in special hospitals). Average bed occupancy was only 83.3 per cent (91.3 per cent in 1965).

1223. MÜLLER, H.-W. Mehr als 2000 Krankenhäuser sind in gefahr. **[More than 2,000 hospitals are in danger.]** *Krankenhaus*, Stuttgart, 1977, April, vol. 69, no. 4, pp. 122-124.

The author, who is the director of the German Hospital Association, condemns the Federal Bill on the Limitation of Health Insurance Costs which he claims could result in bankruptcy for the 2,184 private hospitals and hospitals run by charitable organizations (which form 63 per cent of all hospitals in Western Germany). The proposals in the Bill would give too much power to the health insurance authority and would take away the freedom of these hospitals to plan, finance and manage their affairs. The German Hospital Association expresses its willingness to discuss these problems with federal and *Land* governments.

1224. LINN, M. W., GUREL, L. and LINN, B. S. **Patient outcome as a measure of quality of nursing home care.** *American Journal of Public Health*, Washington, 1977, April, vol. 67, no. 4, pp. 337-344.

Over a nine-year period, 1,000 male patients from a general medical Veterans Administration Hospital in Miami, Fla., were studied immediately before transfer to community nursing homes, one week after transfer and six months later. Patients

were classified on follow-up as improved, the same, deteriorated, or dead. The results indicated that nursing homes with more professional nursing hours per patient were associated with patients being alive, improved, and discharged from the home. Better ratings on meal services were related to being alive and improved. A higher professional staff-to-patient ratio, better medical records and more services were related to the number of patients being discharged from the nursing home.

PLANNING, DESIGN AND CONSTRUCTION

HOSPITAL DESIGN

See also Abstract Nos. 1311, 1346

1225. BILLING, A. **Concept of the Nucleus hospital. Part 1. Philosophy.** *Nursing Mirror*, Sutton, 1977, May 26, vol. 144, no. 21, pp. 21-23.

The combination of cutbacks in hospital building and the development of a more integrated health service has given rise to the concept of the Nucleus hospital, that is, a hospital capable of expansion and versatile in its departmental provision. Initially, the Nucleus hospital will provide basic services in accordance with the needs of the area and will not include an educational centre or residential accommodation. The design consists of the following component parts: (i) clinical spaces; (ii) service and supporting departments; (iii) communication routes; and (iv) primary energy sources and plant rooms. Expansion can be achieved by: (i) altering the use of similar spaces; (ii) the addition of more accommodation; (iii) a change of use of low-cost accommodation; such as offices. The Department of Health and Social Security have planned the basic design, but final details will be left to the Regional Health Authorities. The building of the first Nucleus hospital is expected to start at Newham in mid-1977.

1226. CSOBAJI, S. B. **Anticipating future codes to allow for later construction.** *Hospitals*, Chicago, 1977, Feb. 1, vol. 51, no. 3, pp. 135-136, 139, 140.

St. Elizabeth Hospital South, Covington, Ky., is designed for incremental growth from 180 to 350 beds to ultimately 500 beds. The designers had to produce an optional hospital at each stage of growth from a functional and operational point of view as well as a hospital that would meet codes and regulations both for the present and the future. The design aims to maximize efficiency in the movement of patients and staff with minimum dependence upon elevators. The design of the hospital is outlined, together with the structural alterations that will be required when the hospital expands. The major problems were anticipating future code requirements and determining code intent. Complete sprinkler protection has been provided throughout, thereby eliminating four sets of stairs and offsetting the cost of sprinkler protection for the entire structure. Smoke detectors were installed instead of sprinklers in the critical care areas and hazardous areas of the building. Savings were made through the elimination of fire resistance rating requirements for all doors and hardware. The final result is a hospital of unusual design that is both functionally and architecturally adapted to difficult site conditions, and in full compliance with all code requirements. The final cost will be

$64 per square foot, 20 per cent lower than current prevailing hospital costs in the Cincinnati/Northern Kentucky area.

1227. GINSBERG, D. L. and PIERSON, P. S. **Have building codes been worth the cost?** *Hospitals*, Chicago, 1977, Feb. 1, vol. 51, no. 3, pp. 79-80, 84, 86-87.

All building design in the United States is governed by 'standard' building codes which are concerned with structural adequacy and fire safety. The basic codes in the United States are discussed together with the most recent recommendations. The development of barrier-free design has had the most recent impact upon the design and standards of bed units. The emphasis placed upon heating and ventilation is discussed from the earliest designs in the 12th century to the present day. Codes for gas and vacuum systems and electrical safety are discussed. The codes and standards applied to hospitals are, on the whole, reasonable and useful measures of the quality of buildings. Two features of the rules thought to be weaknesses are the frequency of change and the conflict that occurs among standards that are the work of dozens of different bodies. However the pluralistic nature of the code-making process may be to the advantage of the whole hospital field and the patients.

1228. PLATT, A. J. **Code checklist is indispensable in making codes manageable.** *Hospitals*, Chicago, 1977, Feb. 1, vol. 51, no. 3, pp. 91-92, 94, 96-97.

Code application has become increasingly complex in the United States. A systematized approach to codes is essential to avoid the confusion that arises with ambiguous code references. Code analysis and interpretation should be part of the services offered by professional architectural and planning firms. The owner of the new facility should be made aware of: (i) which codes will apply; (ii) which agencies will be involved; and (iii) who will be in charge of approvals and inspection. The two types of code: structural and type of occupancy, are outlined, together with the degree of overlapping that may arise. The greatest source of conflicts in codes is probably in the interpretation of semantics. The health care facility should develop its own interval code compliance review system and code checklist; code management can be adapted within the structure of the health care facility's own trained staff. Code enforcement becomes a problem only when the institution is forced to comply at an inappropriate and expensive stage of the planning or building process. Code management based on checklists, an internal commitment, and accurate information can help maintain a health care facility that measures up to the law and the expectations of the owner.

DESIGN OF INDIVIDUAL GENERAL HOSPITALS

1229. KÖHLER, and others. Das Kreiskrankenhaus Deggendorf. **[The Deggendorf district hospital.]** *Krankenhaus*, Stuttgart, 1977, March, vol. 69, no. 3, pp. 93-101.

The 434-bed Deggendorf Hospital, the second stage of which was completed in November 1976, consists of a podium, housing general service and treatment areas, above which rises the T-shaped five-storey ward block. A typical ward floor has a 33-bedded ward in each of its three wings which are on a single corridor plan. Each ward has one single, eight two-bedded and four four-bedded patients' rooms. Details are given of the technical installations and of the structural system. The paper is

illustrated with a site plan, outline floor plans, elevations, communication diagrams and seven photographs.

DESIGN OF SPECIAL HOSPITALS OR UNITS

See also Abstract Nos. 1346, 1351, 1359

1230. MOED, L. **Special care units: keeping pace with codes, medical technology.** *Hospitals*, Chicago, 1977, Feb. 1, vol. 51, no. 3, pp. 99-100, 102, 104.

The continuing need to improve the quality of patient care together with advances in technology and medicine contribute to the constantly evolving health care environment. A need has been created for special units aimed at providing types of nursing care and medical equipment that are not feasible in conventional settings. A new surgical intensive care unit (ICU) has been developed at the New York Hospital—Cornell Medical Center, out of space made available when an operating room was upgraded. The new unit provides centralized sources for the support of paediatric and general surgery patients in a flexible environment that could be used for non-intensive care when the need for intensive care was low. The design of the unit is outlined. A neonatal intensive care unit, also at New York Hospital, incorporates a progressive care concept with three five-baby intensive care spaces, three eight-baby intermediate care spaces and a 10-baby special care nursery for convalescent babies. Computer-assisted monitoring is used to help in placing infants in the appropriate care area. The design of the unit is outlined. The new emphasis on energy and resource management may be reflected in the codes, but since codes endeavour to provide standards for all health care facilities, they will continue to be out of phase with architects and administrators seeking the best and most economic design decisions.

1231. **Designing to clear confusion.** *Health and Social Service Journal*, London, 1977, May 13, vol. 87, no. 4541, p. 801.

The design for the new geriatric unit next to St. Luke's Hospital, Teesside (architects: George Trew Dunn Beckles/Wilson Bowes), was developed in close consultation with the area medical officer in charge of geriatric treatment in South Cleveland. By careful planning patient rooms are arranged to get as much sun as possible; great care has also been taken to make sure that the building is efficiently designed for the staff. Although separately managed the unit receives meals and heating from St. Luke's Hospital. The two ward units each contain five four-bed (each with a sitting area), two two-bed and four single rooms. Each unit also has a day/dining room and kitchen, dirty and clean utility rooms, linen store, bathrooms and lavatories. The single-storey building is arranged around a sheltered and planted courtyard. Special features include: brown carpet tiling in all entrances, circulation areas and offices, but split plastic flooring in wards and dayrooms; vertical clerestory windows (to avoid problems of downdraught and glare) with heating pipes below them; use of warm browns and yellows predominately, with small areas of red and blue; and use of colour to help patients find their way about the unit.

ENGINEERING SERVICES

INSTALLATIONS IN GENERAL

See Abstract Nos. 1227, 1228

ARTIFICIAL LIGHTING

1232. LANGE, S. and STEINBÜCHEL-RHEINWALL, C. Tageslicht im Krankenhaus. **[Daylight in the hospital.]** *Krankenhaus*, Stuttgart, 1977, April, vol. 69, no. 4, pp. 139-145.

The problem of daylight in hospitals is a matter of concern more for staff working areas than for wards and patients' rooms. Courtyards and light wells in examination and treatment blocks are not satisfactory: more useful is the provision of light wells in a horizontally laid out supply centre although the extra costs of such a design, and of the necessary extensions to automatic transport lines must be borne in mind. Attempts to lay down general rules for the length of time staff should work in artificially lit rooms and for the grouping of rooms according to whether natural lighting is essential, desirable or unnecessary, do not work out in practice. What is required, instead of the application of abstract rules, is the collaboration of all concerned in the planning of individual hospital projects so that the staff who are to work in the rooms get maximum comfort. The paper includes sketch plans of a number of layouts for different hospital areas in relation to daylight provision.

COMMUNICATION SYSTEMS

1233. MULLERS, C. and others. **Cost factors in urban telemedicine.** *Medical Care*, Philadelphia, 1977, March, vol. 15, no. 3, pp. 251-259.

In 1971 the role of an East Harlem well-baby clinic was expanded to provide primary care using paediatric nurse practitioners. In December 1972 a bidirectional black-and-white cable television link between the medical centre and the clinic was established to provide the nurse practitioners with access to physician consultation. Starting in July 1974, five sessions were held with a physician on site and four using teleconsultation with physicians at the medical centre terminal. The overall consultation rate during periods of remote physician coverage was 21 per cent, compared with 24 per cent during on-site coverage. The telephone became a partial substitute for the television for some uses but could not replace it in diagnostic decisions. As telemedicine is obviously under-used in a one-satellite system, a five-satellite network was compared with other ways of delivering service. The resulting estimated cost of $18.50 an hour, or two-thirds of the cost of a physician providing direct care, includes a television component of $5.30 an hour of use in a 1,750-hour year. The critical factor is that the nurse practitioner can be a physician substitute if there is television backup. The television appears to prevent unnecessary referrals compared with a physician on-site. Whether television increases the length of the consultation compared with the telephone for conditions of equal severity is not entirely clear. If television is compared with transporting a patient to a central place, the implicit value of transport time and desirability required to justify using television is $7.55 per consultation in a five-clinic network. Geographical and other barriers to physician availability enhance the potential for application of telemedicine.

VENTILATION AND AIR-CONDITIONING

1234. MÜLLER, H. E. Die medizinische Bedeutung von Klimaanlagen. **[The medical significance of air conditioning.]** *Deutsche Medizinische Wochenschrift*, Stuttgart, 1977, April 29, vol. 102, no. 17, pp. 639-643.

This is a survey of the literature, with 71 references, on the medical aspects of air-conditioning; it is not limited to the hospital use of such installations. The subject is dealt with under the following heads: construction and functions of air-conditioning plant; cooling; bacterial air contamination during humidification; disinfectants in the cleansing water; fungi, actinomycetes and organic particles in the airstream; and asbestos.

MAINTENANCE OF BUILDINGS AND EQUIPMENT

1235. BRINKMAN, M. O. and DRUE, R. H. **Biomedical maintenance—what's it worth to you?** *Hospital Topics*, Neptune, N.J., 1977, March/April, vol. 55, no. 2, pp. 49-54.

A cursory study of plant and equipment maintenance at Memorial Hospital Medical Center, Long Beach, Calif., showed that well over $150,000 was being spent on biomedical engineering, repair and maintenance. As a result the hospital appointed a consultant specializing in the maintenance field with the objective of developing a complete and competent biomedical maintenance and repair programme at the least possible cost. The study began with a complete inventory of all clinical equipment. Coupled with it were copies of all maintenance agreements, copies of all leases that included maintenance, and maintenance costs broken down by department, instrument, labour, travel and parts. These four basic data sources were then analysed. The recommended approach for least possible cost included a combination of internal and external service efforts; the internal department would have two full-time staff. Performance reviews were undertaken after one and two years; details of these are given. Although the objectives have not been achieved in total, the programme has generated worthwhile cost savings, much improved maintenance and much better maintenance control. It is hoped to complete the control and documentation programme soon and to do most of the hospital's equipment maintenance on a cost-effective basis in 1977.

EQUIPMENT, FITTINGS, FURNITURE

INTERIOR DECORATION

See Abstract No. 1316

WARD FURNITURE, FITTINGS AND EQUIPMENT

1236. SAVAGE, J. H. **Anti-climbing hospital cot attachment.** *Nursing Mirror*, Sutton, 1977, May 12, vol. 144, no. 19, pp. 68-69.

An anti-climb device which can be attached to the ends of existing cot models was developed at Brook Hospital, London. There are two vertical supports clamped to the

cot ends and hinged to these are brackets carrying the climbing barriers, which resemble horizontal ladders. There is hand clearance between the 'ladder' frame and the cot side, and each frame can be moved up-and-over to come to a position five feet four inches above floor level along the centre line of the cot, allowing room to attend the child. All clamping and locking devices are arranged so as to be inaccessible to the child but easily operated by the nurse. The attachment is made of hardwood and thick plywood and weighs only 12 pounds and technical details are given.

LIFTING DEVICES, HOISTS

1237. SAVAGE, J. H. **Children's ward traction pulleys.** *Nursing Mirror*, Sutton, 1977, May 26, vol. 144, no. 21, pp. 34-35.

A new type of pulley has been designed to prevent the cords becoming detached when children are undergoing weight-traction treatment. It comprises a three part frame (two sides bolted on to a narrow base), housing a flat-rimmed pulley. A bolt is screwed into the base and projected downwards, passing through a hole in the main support which is clamped to the bed or cot, and providing a self-aligning action with the child's leg. The design also prevents any movement of the child's leg displacing the cord. The bases were made of channel aluminium and the sides of perspex. The pulleys used were old-style two inch diameter roller-skate wheels, with spindles of steel belts. The support was an aluminium twelve inch bar on a bracket which has two bolts passing through a batten to form a clamp. The cross-bar has a series of holes allowing pulleys to be mounted at various spacings.

EQUIPMENT GENERALLY

See Abstract No. 1235

ELECTRONIC EQUIPMENT

1238. BRUINING, H. A. Video-systeem voor patiëntenbewaking. **[Video-system for patient monitoring.]** *Instelling-Management*, Amsterdam, 1977, April, no. 4, pp. 79, 81.

The system, applied in the 9-bed intensive care unit, of Dijkzigt Teaching Hospital, Rotterdam, monitors heart and respiration frequencies, temperature, arterial blood pressure, pressure in the pulmonary artery and the left heart ventricle, and respiration pressures in the chest. Some recordings are given in numbers which reduces the error margin. The volume of blood moved per heart beat can be calculated from the blood pressure curvature. The system provides for an early recognition of danger signals which allows for the provision of early stage treatment, the effects of which are shown on a 'trend recorder' attached to the monitoring instruments. These recordings will be stored for computer processing. The early stage treatment has led to better medical results and shorter patient stay once the staff became familiar with the technological improvements.

STAFF GENERALLY

STAFF COMPLEMENTS

See Abstract Nos. 1248, 1347

STAFF MANAGEMENT

See Abstract Nos. 1239, 1245, 1250

STAFF RELATIONS

See Abstract No. 1262

STAFF TRAINING

See also Abstract Nos. 1249-1251, 1280, 1370

1239. McCool, B. P. **Human resource development—an emerging concern.** *Hospital Progress*, St. Louis, 1977, April, vol. 58, no. 4, pp. 74-78.

Human resource development is concerned with the process of increasing the knowledge, skills, health and capacities of the members of a society. Specifically, it is the blending of people, values, job design and resources with the education and training process. In health care, human resource development is required for reasons of cost containment, quality assurance, malpractice activity and unionism. A study was made of the organizational forms of human resources development in seven hospitals. Clients receiving educational services included health staff, physicians, community groups, patients and board members. The main functions of education departments were manpower readiness, staff development, health development and organizational development. A variety of organizational structures were found, mainly centralized or decentralized operations, multi-hospital systems and consortia. In most of the hospitals, patient revenue provided the main source of funds, followed by grants from trusts and government agencies. All the hospitals had good audiovisual facilities. The main problems were the financing and evaluation of programmes and the recruitment of staff capable of managing the departments of education.

1240. Friedrich, P. and Ross, A. **Consortium serves rural hospitals' educational needs.** *Hospitals*, Chicago, 1977, March 1, vol. 51, no. 5, pp. 95-96.

This paper outlines the development of the Health Services Consortium, Seattle, Wash., which now involves ten hospitals at distances up to 170 miles from Seattle and the 292-bed Virginia Mason Hospital, the largest hospital in the consortium and its centre. The main object of the consortium is to provide joint educational programmes. The member hospitals have participated in a wide variety of workshops, seminars, consultation visits, etc. in medicine, nursing, administration, medical records, laboratory technology, infection control, respiratory therapy, radiology, computer services, pharmacy, catering, personnel management and engineering.

1241. DUBOIS, B. Essai sur la rationalisation des politiques de formation continue dans les établissements hospitaliers publics. **[Attempt to rationalize the various approaches to in-service training in public hospitals.]** *Gestions Hospitalières*, Mantes, 1977, April, no. 165, pp. 301-306.

The hospital's in-service training policy must reflect the hospital's general policy. It should also be based on a study of needs, objectives, means, and results. The author offers practical advice on how to prepare and monitor a training policy and how to prepare the budget for it. He suggests that small beginnings and a pragmatic approach are best and recommends careful selection and training of the staff who will carry out the in-service training.

STAFF WELFARE

1242. KIRKUP, V. **Absenteeism: who indulges?** *Hospital Topics*, Neptune, N.J., 1977, March/April, vol. 55, no. 2, pp. 20-21.

Traditionally, management has considered that non-professional staff take the most paid and unpaid sick leave. Motivation is thought to be lower among non-professionals than professionals. Professionals are motivated by advancement and responsibility, while non-professionals are satisfied by the more tangible salary and fringe benefits. The 450-bed Presbyterian Hospital of Dallas collected data covering all staff over a period of four years, July 1970 to June 1974. With 99 per cent certainty, it can be stated that professional staff take more sick leave than non-professional staff. Possible reasons for this finding are suggested, but they are merely speculative. There is a need for a thoroughly documented study so that the reasons for the differences may be determined and corrective measures taken.

1243. MILLIKEN, R. A., MILLIKEN, G. M. and MARSHALL, B. J. **Hospital environmental pollution and employee health hazards.** *Hospital Topics*, Neptune, N.J., 1977, March/April, vol. 55, no. 2, pp. 22, 24, 26.

At present over 400 gases and vapours are subject to United States Occupational Safety and Health Administration regulation; of these more than 70 bear halogens. The development of awareness of the health dangers to operating theatre staff from anaesthetic gases in the atmosphere is outlined. There are also dangers from the use of methyl methacrylate cement in joint replacement surgery, from the use of ethylene oxide in sterilization, from exposure to gaseous toxins, formaldehyde, etc. in the histology and cytology laboratories, and from the use of freon for freezing tissue and in inert propellants. An environmental survey for gases and vapours should be added to present radiation, electrical and physical hazard surveys. Management should review all locations for hazards, investigate all unusual absenteeism and develop a sensitivity to staff complaints about inappropriate working conditions.

1244. BINGHAM, M. and GALLAGHER, T. **Treatment for alcoholic employees.** *Hospital Progress*, St. Louis, 1977, April, vol. 58, no. 4, pp. 70-73, 105.

The 552-bed Mercy Hospital and Medical Center, Chicago, developed an in-patient alcoholism treatment unit more than four years ago. However, until April 1976, staff who reported for duty while under the influence of alcohol or drugs were dismissed

immediately. Recognizing this inequity, the hospital developed a special plan to assist hospital staff who suffer from alcoholism. A full programme of diagnosis, counsel, referral and/or treatment is now part of the centre's staff benefits package. The primary emphasis in training supervisors or department heads is on responsibility and accountability for the job performance of their own staff and on accurate evaluation of this performance. A 16-page booklet and a series of workshops were presented to supervisory and management staff. A trained counsellor is now employed half-time in the programme. By February 1977, 25 staff had been successfully counselled and referred through the programme; only two have been discharged for inability to respond to treatment and counselling. A successful case history is given.

SPECIAL CLASSES OF STAFF

ADMINISTRATIVE AND CLERICAL STAFF

See Abstract No. 1273

MEDICAL STAFF

1245. SCHUTYSER, K. Le point sur la relation hôpital-médecin. **[Focus on doctor-hospital relationship.]** *Hospitalia*, Bruxelles, 1977, vol. 21, no. 1, pp. 14-17.

The present relationship between the hospital and the doctor in Belgium is based on the notion that the hospital provides the patient with lodging and care and provides the doctor with accommodation, staff, and equipment. This notion is reflected in hospital legislation and regulations and also in the attitude of many doctors. To-day there is a movement away from the practice of individual medicine towards group and team medicine and this in turn should lead to the integration of the practice of medicine within the hospital. The question of whether the doctor should work in or for the hospital must be resolved. The author prefers the latter and envisages the hospital as an enterprise offering both care and medical treatment to the patient.

NURSING STAFF

See also Abstract Nos. 1251, 1252, 1280, 1317, 1352

1246. HOLM, A. and RUNING, P. Bistand til lägelig forskning eller samarbejde? Sygeplejersken må anerkendes for sin forskningsindsats. **[Assisting or co-operating in medical research? Nurses' contribution to research work must be acknowledged.]** *Sygeplejersken*, København, 1977, April 6, no. 14, pp. 18-19.

The authors were invited to take part in a two-year research project into the endrocrinological side-effects of two anti-epileptic drugs on 20 male patients. It was obvious that the research would entail an enormous amount of extra work for the nurses and their colleagues. The ward staff was called in to a meeting at which it was explained that only two nurses would be assisting in the research, in order to reduce the risk of errors. The consent of the patients was obtained, and they were divided into a phenytoin group and a tegretol group. The nurses then agreed to co-operate in the research project. Before any nurse, secretary, etc. assists in research, she should ensure: (i) that the aims are acceptable; (ii) that her assistance is compatible with her other duties; (iii) that

everyone taking part is kept fully informed; (iv) that she is, where appropriate, included as one of the co-authors of the resultant thesis; and (v) that problems are not likely to arise in personal relationships during the project. In the case under consideration, the normal work schedule could only be upheld at the expense of a great deal of overtime and sacrifice of time off. Prior insistence by nurses invited to co-operate in research on a series of professional requirements will do much to improve mutual respect and reduce dissatisfaction with and aggressiveness towards doctors.

1247. WERLEY, H. H. **Nursing research in perspective.** *International Nursing Review*, Geneva, 1977, May/June, vol. 24, no. 3, pp. 75-83.

The author shows that nursing research is not as new as some people believe—Florence Nightingale was in fact a great researcher—but the research emphasis eventually petered out. The newer beginnings of nursing research in the United States and the contemporary scene are described. The alternative forms of organizational structure for research are discussed. Among the essential tools for nursing research are: indexes to the literature; abstracts; research in nursing reviews; data retrieval systems; and an international directory of nurses with doctoral degrees. Research support systems are also discussed. Earlier nursing research in the United States was largely concerned with nurses themselves, nursing education and nursing administration, but recently the trend has been towards research on the clinical practice of nursing and evaluation research is becoming a recognized specialty. Earlier research was largely done by social and behavioural scientists, but an increasing number of nurses are now involved. Also discussed are research motivation, research productivity, and research policy development.

1248. CISKE, K. L. **Misconceptions about staffing and patient assignment in primary nursing.** *Nursing Administration Quarterly*, Germantown, 1977, vol. 1, no. 2, pp. 61-68.

Having acted as consultant in the development of a number of primary nursing schemes, the author discusses some common misconceptions regarding staffing and patient assignment, why they exist and what can be done to reverse them. Primary nursing need not cost any more, if the existing staff is used more effectively. The functions of the head nurse, staff nurses, staff licensed practical nurses and nurse aides are outlined. The advantages and disadvantages of geographical, individual and promotional methods of patient assignment are listed and discussed. Considering unique local variables, one method or a combination of methods can be chosen. Primary nursing is generally more effective on medical than on surgical wards, but is still applicable in the latter. Primary nursing assignment can be changed it difficulties occur between nurse and patient.

1249. LÄDRACH, U. Die Ausbildung der diplomierten Gesundheitsschwester. **[The training of the qualified health nurse]** *Hospitals*, Zürich, 1977, May, vol. 47, no. 5, pp. 205-207.

In Switzerland the training of public health nurses is the responsibility of the Swiss Red Cross. Training courses are held at six schools throughout the country and those taking the courses must be either state registered nurses, state registered psychiatric nurses or state registered children's nurses (individual schools can decide whether to

admit any or all of these categories). An outline is presented of the main duties of public health nurses, of the syllabus of the courses, and of instruction methods.

1250. NELSON, C.A. and ARFORD, P. H. **Strategy for clinical advancement.** *Journal of Nursing Administration*, Wakefield, 1977, April, vol. 7, no. 4, pp. 46-51.

Following the decentralization of the organizational structure of the Department of Clinical Nursing of the Medical University of South Carolina, it became apparent that there was an urgent, growing need for a clinical organizational line that would complement the administrative one. The two positions of clinical specialist and administrative assistant are collaborative and seldom overlap; the functions of each are outlined. On the clinical side the staff nurse position is divided into six separate, distinct levels. Progression through these levels is dependent on meeting requirements in continuing education, clinical ability and leaderships. Details of these are given.

1251. TOWNSEND, I. **A blueprint for the future.** *Nursing Times*, London, 1977, May 26, vol. 73, no. 21, pp. 793-794.

If nursing education is to make efficient use of learning resource centres, it must realise that this method makes definite theoretical, social and economic assumptions: (i) the learner learning is more important than the teacher teaching; (ii) it is not necessary for students to learn en masse; and (iii) the media present in a school of nursing have a continual potential rather than ad hoc use. Most centres in schools of nursing are either embryonic or serve a relatively small community. If they are to flourish there is a need for a great deal more active discussion on their role at all levels. An exchange of information is necessary for a start. The National Health Service Learning Resources Unit has already started on this. The information network it has established is reproduced in diagrammatic form. Ideally local centres should be well supported at central or regional level.

1252. ZEIGHAMI, B. and others. **What's behind the nursing brain drain? A study of the attitudes of Iranian nurses.** *International Nursing Review*, Geneva, 1977, May/June, vol. 24, no. 3, pp. 84-87.

A study was carried out to determine the sources of satisfaction and dissatisfaction of nurses within Iran. A total of 270 questionnaires were sent by the directors of nursing schools to all graduates of their schools whose current addresses were known; 143 replies were received—all from nurses residing in Iran. Of the respondents 113 were employed in hospitals, 36 in private clinics, five in the army and two elsewhere (some had more than one employer). The respondents listed low salaries, undesirable working hours and the professional's lack of status as their most important sources of dissatisfaction. Low salaries and undesirable working hours are sources of dissatisfaction in both developed and developing countries, but lack of social status is not a problem in developed countries. It is probable that all these complaints are factors in nurses' desire to work in another country. For those developing countries wishing to discourage emigration, improved salaries and the promotion of nursing as an outstanding profession seem to be desirable.

1253. ZUMOFEN, M. Infirmières: responsables de l'hygiène hospitalière? **[Nurses: are they responsible for hospital hygiene?** *Hospitalia*, Bruxelles, 1977, vol. 21, no. 1, pp. 21-25.

The author reviews the literature on the subject and stresses the nurse's role in the

control of infection and maintenance of high standards of hygiene in the hospital. He suggests the appointment in every hospital of a nurse with special responsibility for hygiene. His/her functions would include the prevention of infection, teaching, supervision, research, dissemination of information, some administrative duties, and membership of intra- and inter-hospital committees.

1254. OLSEN, A. **Change takes time.** *Nursing Administration Quarterly*, Germantown, 1977, vol. 1, no. 2, pp. 51-59.

Definitions are given of comprehensive nursing care, functional nursing, team nursing and primary nursing. The organization and management of team nursing in a 33-bed general medical teaching unit is described. Analysis of the system demonstrated that it is the primary nurse who is accountable for planning, implementing and evaluating patient care. Implementing primary nursing in the unit took three years, September 1973 to September 1976. Implementation has depended on the achievement of three major goals: (i) a safe patient care environment; (ii) definition of nursing staff clinical performance criteria that reflect patient care criteria; and (iii) nursing staff acceptance and commitment to the primary nursing concept. Patients, doctors and nurses have accepted the system.

1255. **The Evanston story: primary nursing comes alive.** *Nursing Administration Quarterly*, Germantown, 1977, vol. 1, no. 2, pp. 9-50.

In 1966 Evanston Hospital, Ill., decided that nursing was indeed a clinical discipline and should have a chairman like every other clinical department. In January 1971 nursing care was still being delivered in functional and team nursing models. Certain important premises were then established with the object of providing quality nursing care. The Nursing Executive Council felt that they were not ready to launch into a primary nursing project, but after a primary care nurse from another hospital addressed them the staff began to feel that consideration of primary nursing would be worthwhile. This paper consists of short individual contributions by nurses at all levels on various aspects of: the restructuring of the system; fixed management of primary nursing; pharmacy and primary nursing; discharge planning and primary care; primary nursing and the specialty unit; and primary nursing and the student.

1256. ARNSDORF, M. B. **Perceptions of primary nursing in a family-centered care setting.** *Nursing Administration Quarterly*, Germantown, 1977, vol. 1, no. 2, pp. 97-105.

In 1973 Family Hospital, Milwaukee, Wis., made a public commitment to provide the best patient care at the lowest cost and to provide that care with the patient and the patient's family as the focus. By March 1976, that commitment had been met—all seven direct patient care nursing units had developed into an interrelating family-centred, primary nursing system. Once a unit was converted, it was apparent that some method was necessary to evaluate the programme. A questionnaire was designed to collect the direct care giver's response; 33 fully completed questionnaires are analysed. In summary, the critical factors appear to be: (i) the educational preparation of the graduate nurse who comes to the hospital; (ii) the administrative support perceived by the nurse, especially in relation to the provision of supportive services; and (iii) the physical environment of patient care units.

1257. SOBCZAK, C. L. **Pharmacy and primary nursing: potential for conflict and cooperation.** *Nursing Administration Quarterly*, Germantown, 1977, vol. 1, no. 2, pp. 89-96.

The chief pharmacist, Family Hospital, Milwaukee, Wis., describes a conflict between the nursing and pharmacy departments at the hospital. It illustrates three points: (i) when two departments are functionally interdependent, changes in the operational systems of one can have disruptive effects, frequently unanticipated, on the other; (ii) conflicts that appear to be interpersonal in nature could actually be the result of a system malfunction between two interdependent departments; and (iii) an understanding of the basis for conflict can provide the opportunity for interdepartmental co-operation.

1258. PISANI, S. H. **Primary nursing—aftermath of change.** *Nursing Administration Quarterly*, Germantown, 1977, vol. 1, no. 2, pp. 107-113.

After a review of the two systems, the staff of a 24-bed psychiatric unit voted to change from team to primary nursing. Even though desired, planned for and agreed upon, this change roused many varied feelings and reactions among the staff. This paper is an account of: (i) the ways in which the change to primary nursing affected individual staff members and their interaction on the unit; (ii) the reasons for those reactions; and (iii) the process used in meeting the resulting problems. Most of the feelings and attitudes fell into three broad categories: fear and anxiety, resistance and confusion. The head nurse emerged as the most significant factor in solving some of the issues raised.

1259. MACKINNON, H. A. and ERIKSEN, L. **C.A.R.E.—a four track professional nurse classification and performance evaluation system.** *Journal of Nursing Administration*, Wakefield, 1977, April, vol. 7, no. 4, pp. 42-44.

This paper briefly discusses and comments on ways to improve the administrative and medical aspects of health care centres. It then focuses on a third area, nursing, and the system developed at the 1,250-bed Jackson Memorial Hospital, Miami, Fla., to classify and evaluate professional nurses. The system is based on the four major elements of professional nursing practice—clinical practice, administration, research and education. Within these elements five different skill levels are identified. They form a flexible system to develop job descriptions for each individual nurse and to evaluate professional nursing performance. The system also serves to reward professional practice.

1260. **A symposium on the developing role of the nurse therapist.** *Nursing Mirror*, Sutton, 1977, May 12, vol. 144, no. 19, pp. 45-56.

The six articles making up this symposium are a selection of those presented at the second annual conference on nursing therapy, held at the Pastures Hospital, Derby in January 1977. The symposium opens with an introductory article on the training of nurse therapists and their place as a member of the psychiatric health team. A national course was formalized in 1975 by the Joint Board of Clinical Nursing Studies for England and Wales, and at present there are only 14 registered nurse therapists and 11 trainees, but their number is growing. The six articles cover the role of the nurse

therapist in the following fields: (i) in general practice; (ii) in cases of child abuse; (iii) in the hospital setting; (iv) in out-patient treatment; and (v) at a day treatment centre. The final article by a community psychiatric nurse compares her work with that of a nurse therapist.

1261. HIRSCHFELD, R. M. A. **Being with madness: personality characteristics of three treatment staffs.** *Hospital & Community Psychiatry*, Washington, 1977, April, vol. 28, no. 4, pp. 267-273.

The study compares the characteristics of non-professional psychiatric staff at Soteria House, a residence for schizophrenics near San Francisco Bay, with representative staff in a university psychiatric ward and a community-based scheme. Supportive care with close personal contact is stressed at Soteria House. Six self-reporting questionnaires containing a large number of items in each, were used. All three groups showed an overall similarity in personality, exhibiting traits particularly suited to dealing with schizophrenics. These included warmth and sensitivity, self-assurance and emotional maturity, and flexibility and tolerance. The main difference was that the Soteria House staff were more introverted and showed more sensitivity to altered states of consciousness than either the university or the community staff. This characteristic helped them to deal intimately with very disturbed people in a less structured environment.

1262. FAUTREL, F. **Why don't nurses complain?** *Mind Out*, London, 1977, May/June, no. 22, pp. 5-7.

Nearly 50 nurses (43 of whom were students) from hospitals for the mentally ill and for the mentally handicapped were asked about their attitudes towards complaining about the living conditions of their patients and the day-to-day working conditions in which they found themselves. The list of items that nurses would complain about, if they felt able to do so, was very lengthy and wide ranging. Too many nurses of junior and middle rank felt that to complain is a futile exercise. Even where regular ward staff meetings were held and nurses were encouraged to make comments they felt that no action was taken; however they often failed to appreciate the work load of senior staff. Many junior nurses did not complain because of a fear of victimization or retaliation. Outspoken student nurses felt that this might be held against when their assessment reports were written. However, neutral reports are more common than critical ones.

1263. HAMILTON, W. B. **Role of the nurse in child psychiatry.** *Nursing Mirror*, Sutton, 1977, May 26, vol. 144, no. 21, pp. 29-32.

Nursing staff for a child psychiatric unit may be of either sex or any age, but must be intelligent and stable, and able to relate to the emotionally disturbed child in an empathetic and warm manner, and with a high degree of tolerance. The most effective nursing group will include staff who can provide: (i) the basic caring function; (ii) 'counselling', that is, encouraging the child to solve his own problems; and (iii) the capacity to advise non-nursing staff and supervize junior nurses. The group functions best in a relaxed atmosphere which helps the child cope with daily living and form group relationships. The nurses must organize a pattern of daily activities for the children and judge when to observe indirectly and when to intervene. They should also maintain close contact with other specialized staff giving treatment, and observe personality and behavioural factors which may help diagnosis or be used to aid recovery.

OTHER PROFESSIONAL AND TECHNICAL STAFF

See Abstract No. 1270

ORGANIZATION AND ADMINISTRATION

See also Abstract Nos. 1240, 1303, 1321, 1329

1264. BAYS, C. W. **Case-mix differences between non-profit and for-profit hospitals.** *Inquiry*, Chicago, 1977, March, vol. 14, no. 1, pp. 17-21.

Considerable interest has been focused recently upon the role of for-profit hospitals in the provision of medical care, particularly with respect to the questions of efficiency and quality. This paper presents data on differences in case-mix within a sample of 41 for-profit and non-profit short-stay general hospitals. It also suggests a framework within which these differences should be evaluated. Specifically, the data relate to the alleged tendency of hospitals organized for profit to treat conditions with the highest cost-price margins (cream skimming) thus leaving the less lucrative conditions to be treated by non-profit hospitals by default. Information on price-cost margins by case-mix was not obtainable, but the available data on case-mix and complexity differences between for-profit and non-profit hospitals are consistent with the cream skimming hypothesis. However, it is argued that concern over the existence and extent of cream skimming is misplaced. The interesting theoretical and policy questions are, respectively, why is the pricing structure of non-profit hospitals such that for-profit hospitals find it profitable to produce only certain types of care, and what would be the relative impact on prices, quantity and quality of hospital care of either prohibiting or encouraging such behaviour by the for-profit sector.

1265. NIX, D. and CATALANELLO, R. F. **'My hospital is different'.** *Hospital Topics*, Neptune, N.J., 1977, March/April, vol. 55, no. 2, pp. 42-48.

The implication of frequent statements that 'my hospital is different' is that organizational and managerial behaviour of hospitals cannot realistically be compared one with another. It is the objective of this study to ascertain how hospitals differ and what they have in common regarding selected dimensions of organizational and managerial behaviour. A theoretical model is developed to provide a framework within which to conduct the study. It is then applied to 17 hospitals in Oklahoma ranging in size from 50 to 600 beds. About 18 staff from each hospital completed a nine-page questionnaire. The hospitals did differ significantly in a number of variables which identify dimensions that should be taken into consideration when attempting to understand differences in managerial behaviour. The size of the hospital was associated with differences in education, group atmosphere, hospital tension and stress, department co-ordination effectiveness and co-workers' task and relationships orientation. Recognition of what organizational and managerial behaviour hospitals have in common and how they differ in terms of behaviour, should provide insights for hospital administrators which will permit them to better assess, understand and effectively manage their own hospital's behaviour.

1266. STULL, R. J. **Many concepts mold multi-institutional systems.** *Hospitals*, Chicago, 1977, March 1, vol. 51, no. 5, pp. 43-45.

Within a relatively short period, the development of inter-institutional relationships has become the most compelling challenge confronting organisational management and public policy. The underlying consensus is clear—technological, financial and managerial requirements of health care delivery can no longer be accommodated within traditional organisation boundaries. The implications of this consensus are being pursued from two approaches—organisational perspective and system orientation. Traditional emphasis on vertical linkage is being replaced by a movement towards horizontal integration. Patterns of multi-institutional arrangements vary widely in content and structure; attempts to classify them are outlined. Alternative patterns of multi-institutional arrangements will have to be further studied, evaluated, and compared according to their performance in fulfilling public expectations for effectiveness and efficiency in health care delivery.

1267. PRICE, L.G. **Analyzing the key ingredients of a shared service organization.** *Hospitals*, Chicago, 1977, March 1, vol. 51, no. 5, pp. 83-84, 86-87.

This paper analyses the intrinsic characteristics that have been fundamental to the success and survival of one co-operative services organization—Hospital Central Service, Inc. of Allentown, Pa. The organization provides, in order of their establishment, laundry, blood bank, group purchasing, credit and collections, microfilming and biomedical engineering. Starting in 1967 with seven hospitals, it now services over 60. Important elements are hospital commitment to the concept, competition with commercial counterparts, ability to provide medical as well as administrative and supportive services, intensive marketing, ability to expand, and ability to identify future programme needs.

1268. GILBERTSON, E. E. **Shared clinical services provide a chance for specialties to thrive.** *Hospitals*, Chicago, 1977, March 1, vol. 51, no. 5, pp. 89-90, 92-93.

St. Alphonsus Hospital and St. Luke's Hospital, both in Boise, Idaho, have had a close working relationship for many years, but the co-operative process described in this paper was formalized in 1970 following a jointly sponsored study by a consultant. The consultant recommended that certain clinical services be provided exclusively at one of the hospitals and that others be concentrated in one of the hospitals. Under the latter arrangement, the hospital in which a particular service was concentrated would provide a full service for that specialty, the other would provide only a basic service in it. The current division of clinical services is shown in a table. The benefits of the system are described, together with other co-operative arrangements and the work of the joint planning committee.

1269. SPIEGELHALTER, F. Der Wolf im Schafspelz der Krankenhausplanung. **[The wolf in sheep's clothing of hospital planning.]** *Krankenhaus*, Stuttgart, 1977, April, vol. 69, no. 4, pp. 132-135.

The author points out that recent legislation in West Germany, which aims at the central control of all investment in hospitals, will severely limit local initiative and have an adverse effect on patient care. He suggests that responsibility should be vested in individual hospital authorities with central government playing a co-ordinating and

advisory role rather than exercising strict central control over all aspects of hospital investment.

1270. THOMA, H. Vorschlag zur Ökonomisierung des österreichischen Krankenhauswesens. **[Proposed economies in the Austrian hospital service.]** *Österreichische Krankenhaus-Zeitung*, Wien, 1977, March, vol. 18, no. 3, pp. 185-186, 189-194; April, vol. 18, no. 4, pp. 241-246, 249-250.

This paper is concerned mainly with the need for further development in the services of medical technicians in Austrian hospitals. Many hospitals have to rely on expensive outside services for technical facilities which could be provided more economically by properly trained technicians on the hospital's own staff. Training of technicians should be provided by a university institution and an outline is given of suitable courses in this field. An adequate complement of properly trained and qualified medical technicians would relieve doctors and nurses of much work which they are not trained to do and thus give them more time to devote to patient treatment and care.

ECONOMICS OF HOSPITAL MANAGEMENT

See also Abstract Nos. 1270, 1310, 1347, 1364

1271. KUSHMAN, J. E. and NUCKTON, C. F. **Further evidence on the relative performance of proprietary and non-profit hospitals.** *Medical Care*, Philadelphia, 1977, March, vol. 15, no. 3, pp. 189-204.

The regional health service agencies (HSAs) established under the United States National Health Planning and Resources Development Act will have broad powers to regulate health providers. This paper argues that there will be a tendency for HSAs to discriminate against proprietory hospitals. It discusses and extends the empirical evidence on the relative dynamic efficiency of proprietary and non-profit hospitals in responding to changes in the economic environment. A model is developed which produces unambiguous policy recommendations; it is applied to four six-year cross-sections for the years 1954 to 1971. A more complex model is constructed including some variables to capture the effect of the Hill-Burton programme. The central conclusion is that proprietary hospitals have a significant role in an efficient hospital system. Planning and regulating agencies must take care to guard the proprietary role against pressures inherent in their own structures. The treatment of proprietary hospitals by HSAs will be a good indicator of their ability and willingness to use the diverse resources of the health care industry to their best advantage.

RUNNING COSTS

1272. FELDSTEIN, M. S. and SCHUTTINGA, J. **Hospital costs in Massachusetts: a methodological study.** *Inquiry*, Chicago, 1977, March, vol. 14, no. 1, pp. 22-31.

The purpose of this study is to develop a method of adjusting hospital costs for inter-hospital differences in case-mix. This case-mix adjusted measure of hospital costliness is intended as a means of management and for understanding and perhaps controlling hospital costs. The statistical analysis provides: (i) a measure of the general impact of case-mix on hospital costs; and (ii) a costliness rating for each individual hospital. It shows that about half of inter-hospital cost variation among Massachusetts

short-stay hospitals can be explained by the measure of case-mix variation. About 40 per cent of the variation in average cost per day is also explained in this way. In short, neither cost per case nor cost per day is an adequate measure of a hospital's performance. The case-mix adjusted measure of costliness provides a way of eliminating a substantial amount of extraneous variation in cost.

BED OCCUPANCY, ECONOMIC USE OF BEDS

See Abstract Nos. 1322, 1348

APPOINTMENT SYSTEMS, WAITING LISTS

See Abstract No. 1338

OFFICE MANAGEMENT AND METHODS

1273. Zur Planung und Organisation von Zentral-Schreibbüros. **[Planning and reorganization of the hospital central typing pool.]** *Krankenhaus*, Stuttgart, 1977, March, vol. 69, no. 3, supplement, pp. 1-3.

Without going into any detail this paper puts forward some general principles which should be borne in mind when a central typing pool is being planned for a hospital. Among the points made are the following: the pool should be associated with, and in close proximity to, such services as central registry, reproduction, microfilming, post, and library; planning for a typing pool should be started at an early stage and those concerned with its operation should be consulted; officers using dictating services as well as typists should be properly trained in the use of specialized equipment; and typists should take regular refresher courses to ensure that they are *au fait* with new developments.

ELECTRONIC DATA PROCESSING

See also Abstract Nos. 1285, 1331, 1337

1274. De Dombal, F. T. and Grémy, F. editors. **Decision making and medical care: can information science help?** Proceedings of the IFIP Working Conference on Decision Making and Medical Care. Amsterdam & Oxford, North-Holland, 1976, xviii, 603pp. £35.00

This conference was devoted to discussion of the ways in which information science could aid doctors in making the best decisions about their patients and the best use of health care resources. The use of mathematical analysis and computers as aids to clinical decision making is presented in most of the papers. Apart from a session introducing decision making in clinical medicine and public health, other sessions dealt with current work in clinical decision making, the mathematical background of decision making, Bayes and free processes, and multi-variate analysis. Lists of references are given with each of the 50 papers included in the book.

1275. Buck, C. R. **Assuring EDP effectiveness: the CEO's role.** *Hospital Progress*, St. Louis, 1977, April, vol. 58, no. 4, pp. 62-65.

The chief executive officer of a hospital has limited time to allocate to electronic data

processing (EDP) functions. This paper discusses three issues which require his detailed attention in order to ensure EDP effectiveness: (i) understanding clearly the potential benefits of EDP and insisting on their explicit enumeration in the evaluation of developmental projects; (ii) developing an effective staff through the selection of a competent EDP director; and (iii) planning EDP in relation to explicitly defined institutional needs and objectives.

1276. BARTL, N. Erfassung von Patientendaten mit Hilfe Intelligenter Terminals. **[Collecting data on patients with the aid of intelligent terminals.]** *Krankenhaus Umschau*, Kulmbach, 1977, April, vol. 46, no. 4, pp. 254-255.

A technique for recording patient's personal data, using computer terminals is described. The system involves built-in checks which give acoustic and optical signals when faulty data are put in. Self-adhesive labels giving necessary patient data are automatically printed out and these data are also stored on magnetic tape for future use.

1277. GEBHARDT, M. Eine überregionale EDV-Lösung für Krankenhäuser—Stand nach 6 jähriger Anwendung— **[An inter-regional electronic data-processing solution for hospitals. Situation after six years of use.]** *Krankenhaus Umschau*, Kulmbach, 1977, April, vol. 46, no. 4, pp. 208-214.

In January 1971 the Churches Centre for Electronic Data Processing in Frankfurt/Main was set up and four religious hospitals were linked with it. The Centre now services 711 establishments in two federal *Länder* with a total of 115,248 beds: these include both religious hospitals and those run by charitable organizations. The programme offered includes salaries and wages; performance; billing; statistics; patient data; book-keeping; and cost accounting. Details are given of the services offered and of the terminals system for data transmission. The paper includes specimen print-outs.

1278. KLAUSMANN, H.-S. Entwicklungstendenzen der EDV im Gesundheitswesen. **[Development trends in electronic data processing in the health service.]** *Krankenhaus Umschau*, Kulmbach, 1977, April, vol. 46, no. 4, pp. 214, 217-219.

This is a report on 'Medcomp 77', an international congress on computing in medicine held in Berlin in February 1977. It is in three parts. The first deals with the use of minicomputers by private medical practitioners. The second is concerned with electronic data processing in hospitals and covers the following aspects: documentation, medical histories and identification systems; patient treatment systems; patient monitoring systems; multipurpose communication systems; ward and administrative systems; operations research and model formation; experiences with transmitted systems; and acceptance of hospital information systems. The third part of the report deals with computer systems for regional health care.

1279. LARIVIÈRE, R. S. Le programme de renseignements hospitaliers est-il un instrument de gestion toujours adéquat? **[Is the Hospital Information Program an adequate management tool?]** *Administration Hospitalière et Sociale*, Montréal, 1977, March/April, vol. 23, no. 3, pp. 4-8.

Data supplied by 67 per cent of Canadian hospitals and processed by computer form the basis of the Hospital Information Program from which each hospital can compare

its performance with that of others of the same size and type. The author recommends more exact definition of the terms and indicators used in the Program and clearer identification of the indicators so as to make the significance of the data more immediately apparent. He also recommends that those responsible for supplying the data should study the register of Hospital Information Program indicators, the list of unit values devised for clinical laboratories, and a management monitoring guide for dietetics departments.

LIBRARIES

See also Abstract No. 1251

1280. TOWNSEND, I. **Who does what [in the resources area]?** *Nursing Times*, London, 1977, May 5, vol. 73, no. 18, pp. 657-658.

The staff in charge of a resources centre in a school of nursing can be divided into three types: (i) the librarian, to organize the contents; (ii) the media resources officer, to plan and advise; and (iii) the audio-visual technician to look after the electronic equipment. The second category is found least often in schools of nursing and the training is more arduous than that of a technician. The media specialists are part of a wider teaching team, and if resource centres are to gain importance in nursing education, much planning needs to be done on how the skills of the resources centre staff may best be employed.

ORGANIZATION AND METHODS, WORK STUDY

1281. RODENBACH, M. T. and GRIJPDONCK, M. Analyse de système de l'unité de soins. **[Systems analysis (in the ward).]** *Hospitalia*, Bruxelles, 1977, vol. 21, no. 1, pp. 4-14.

The authors present a model for integrated patient care based on the primacy of somatic and non-somatic care of the patient by staff who find satisfaction in their work and whose working environment is stimulating. Staff are allocated to patients rather than to specific tasks, and emphasis is placed on team nursing, a 30-bed ward being divided into two or three sections with a team allocated to each section. The team leader is responsible for co-ordination, and the role of the ward sister becomes more managerial; administrative tasks are performed by a secretary and ward assistant. Considerable emphasis is placed on improvements in communication between staff by means of better records, group discussions, and careful passing on of information at the end of each period of duty. A daily timetable ensures that the maximum amount of time is devoted to care and that the central services arrange their hours to suit the patient and not vice versa, and a patient profile defines all the care to be given in the ward.

MEDICAL RECORDS

See also Abstract Nos. 1275, 1276, 1278, 1283, 1323, 1324

1282. MCNAB, J. **HMRI has come of age.** *Dimensions in Health Service*, Toronto, 1977, April, vol. 54, no. 4, pp. 8-9.

The Hospital Medical Records Institute (HMRI), Ontario, is known throughout

Canada as the only major medical information system developed within Canadian borders. The difficulties involved in the establishment of the system which has taken 14 years to become known, included imposed policy defects which limited the ability to provide detailed statistical comparisons; under capitalization; and lack of knowledge of computers and how to manage them. The HMRI aims to become the accepted national health information system when measured against the criteria of: (i) degree, relevance and scope of use; (ii) facility, speed and economy of response; and (iii) completeness and quality of data. The specific service objectives applicable to hospitals and all organisations concerned with health care are discussed.

1283. TRUSTY, T. H. **X-ray microfilm saves hospitals money.** *Medical Record and Health Care Information Journal*, Truro, 1977, May, vol. 18, no. 2, pp. 265-269.

The volume of X-rays currently produced is creating increasingly difficult storage and information documentation problems. A modern solution is microfilming. The conversion can be performed by establishing an in-house microfilming system or by using a microfilm service company. This paper compares the costs and benefits of each of these methods. The expense of installing and maintaining an in-house facility can be defined by tangible costs (equipment purchase and depreciation, supplies, labour, other) and intangible considerations (personal problems, space saving, convenience). As with the in-house system there are tangible costs (service charge, equipment) and intangible considerations (file integrity, space opportunity cost, convenience) associated with the service company. A good quality service company can save the hospital two to six times the tangible costs with little or no administrative or space requirements, provided that it is carefully selected with regard to quality, service and price. The in-house system offers complete control of the microfilming operation within the hospital, thereby maintaining an inviolate file system.

1284. WEINGARTEN, M. A. and REISNER, S. E. **Acceptability of a new medical record with a problem-oriented synopsis.** *Medical Record and Health Care Information Journal*, Truro, 1977, May, vol. 18, no. 2, pp. 261-264.

A new medical records system, including a problem-oriented medical-oriented synopsis, an improved filing system and a unified medical and nursing file, was introduced in the neonatal intensive care unit at Beilinson Medical Center, Petah Tikua, Israel. The staff's expectations of a records system were used and subjective assessment criteria in evaluating the previous system and comparing it with the new system after three months of use. Significant improvement was perceived in communication between doctors and between doctors and nurses, and in the extent to which progress in the clinical investigation was apparent from a patient's record. The length of ward rounds and the ease of writing case summaries were not considered to be significantly affected, and no increase in paperwork was noticed. The results indicate that the new records system was highly acceptable to its users, which is a prerequesite to its being used effectively.

1285. MCDONALD, C. J. and others. **A computer-based record and clinical monitoring system for ambulatory care.** *American Journal of Public Health*, Washington, 1977, March, vol. 67, no. 3, pp. 240-245.

The Regenstrief Medical Record System (RMR) is a computer-based medical record

system for out-patient clinics and has been in use at the Wishard Memorial Hospital, Indianapolis since 1973. It carries the records of 7,500 patients representing 30,000 visits per year. Using CARE computer language, instructions for treating a patient are communicated to the computer as protocols. The system records most kinds of clinical information, including physical findings, record of drugs taken and laboratory data on a patient encounter form. For each visit to a clinic the RMR produces three reports for the doctor: (i) a summary report and a flow sheet of the patient's medical record; (ii) a surveillance report; the computer messages generated by the protocols; and (iii) the patient encounter form, already described. The input data can be machine read by an optical reader and the output is on paper, being less expensive and more informative than cathode ray tube displays. The doctors like the computer reports which save them a small amount of time and serve as useful reminders of clinical events and conditions.

1286. ROGER, F. H. Dossier médical et microfilmage. **[Medical records and microfilming.]** *Hôpital Belge*, Bruxelles, 1977, March/April, vol. 20, no. 126, pp. 9-14.

Drawing on his experience in the University Clinics in Louvain, the author discusses the what, where, when, how, and why of microfilming of medical records, what it costs, and its advantages and disadvantages. The amount of space required for storage is reduced and access to information in individual records is speeded up. Microfilming does not of itself reduce the cost of maintaining records and since it is a static rather than a dynamic system, it would require to be linked to some sort of automatic data processing system to be of value for purposes (research, comparative studies, epidemiological surveys) other than that of storage of data relating to the individual patient.

HOSPITAL STATISTICS

See Abstract Nos. 1221, 1222, 1279

LEGAL ASPECTS OF HOSPITAL ADMINISTRATION

See also Abstract No. 1223

1287. GIROUX, F. **Controlling locks and keys.** *Dimensions in Health Service*, Toronto, 1977, April, vol. 54, no. 4, pp. 31-33.

One of the most basic aspects of a security scheme is the locking system. A locked door is usually a deterrent to most people although a determined thief will find alternative methods of entry. The majority of internal thefts occur as a result of staff negligence, leaving doors, desks and filing cabinets unlocked. The chief cause of this type of theft in a hospital is the increasing number of out-patient department patients and visitors. One department should have control of all the keys within the complex; if there is a security department it is logical that it should handle the keys. The need for a standardized keying system is discussed. The advantages of a master key system are that each department head would carry few keys but would still have complete access to those areas under his jurisdiction; and there would no longer be any need to alter the whole locking device or handle assembly to change a lock. The need for strict key control is discussed. A separate logging system should be used with an alphabetical card index system for the control of lockers. The use of a master keying system, to

control the various institutional keys, and adequate staff instruction can eliminate a large percentage of internal thefts.

FINANCE AND ACCOUNTING

FINANCE

See also Abstract Nos. 1233, 1264, 1310, 1325

1288. LEROY, M. Les problèmes financiers des hôpitaux. **[Hospital financial problems.]** *Hôpital Belge*, Bruxelles, 1977, March/April, vol. 20, no. 126, pp. 31-35.

A review of some of the aspects of hospital financing in Belgium. In 1963 the government laid down standard maintenance charges for patients in both private and public hospitals. Any deficit in this account in the public hospital was met by the communes and the Communal Welfare Fund. Since 1966 the public hospitals have been able to borrow from the Belgian Communal Bank and their debt to this body has risen from 949 million francs in 1967 to 13,830 millions in 1976. In 1976 the Ministry of Health agreed to pay 25 per cent of the maintenance charge, but this payment was based on 1975 prices and did not take account of changes in the cost of living index. It is likely that the public hospital deficit will continue to rise and the author suggests that regional rather than individual communal funds should cover this deficit.

1289. WALCHE, R. de. Problèmes financiers. **[Financial problems.]** *Hôpital Belge*, Bruxelles, 1977, March/April, vol. 20, no. 126, pp. 26-30.

The author, who is director of finance at the Belgian Ministry of Health, discusses various topical problems within the context of the Belgian hospital system. These include the ceilings placed on hospital construction costs; the creation of a public fund to guarantee loans advanced for hospital construction; subsidies for the purchase of large items of equipment; the possibility of introducing a system of government payments to hospitals to cover some part of patient maintenance; the distribution of the public hospital deficit between communes; delays in the settlement of patients' accounts; delays in fixing the standard charge for maintenance; the financing of construction from operational funds, and the burden on hospitals of their deficit accumulated over the years.

1290. ADAM, R. Kritik am Medicaidsystem in den USA. **[Criticism of the Medicaid system in the USA.]** *Österreichische Krankenhaus-Zeitung*, Wien, 1977, April, vol. 18, no. 4, pp. 260-261.

'Medicaid', introduced in 1966 in the United States to provide medical care for the lower income groups, is now costing over 15 thousand million dollars a year. A report issued in August 1976 by a sub-committee of the Senate has uncovered 'rampant fraud' and abuse of the system, examples of which are given in this paper. The Department of Health, Education and Welfare challenges the extent of this abuse and points out that a 'fraud and abuse investigations unit' has been set up to investigate Medicaid.

1291. BARTON, D. M. and SMILEY, R. H. **Estimating the cost of health insurance programs.** *Inquiry*, Chicago, 1977, March, vol. 14, no. 1, pp. 51-62.

Despite the obvious importance of programme costs in choosing between competing proposals, the current debate over national health insurance in the United States has proceeded, with but one exception, without reference to a methodological framework for estimating such costs. This paper presents such a framework and uses it to estimate the cost, in 1975, of a modified version of the Catastrophic Insurance Protection Plan (CIPP), a health insurance plan proposed for New York State. If the extent of private health insurance is unchanged under CIPP, it is estimated that the cost to New York State in 1975 will be between $460 and $482, depending on the amount of administrative costs. If, however, half the people currently carrying private health insurance drop their coverage, the cost will be between $2,032 and $2,134 billion; if everyone drops private health insurance, it will be between $3,599 and $3,780 billion. Some factors qualifying these findings are outlined.

1292. HALL, C. P., FLUECK, J. A. and MCKENNA, W. F. **Medicaid and cash welfare recipients: an empirical study.** *Inquiry*, Chicago, 1977, March, vol. 14, no. 1, pp. 43-50.

The long-term goal of Medicaid was to encourage States to work toward liberalizing eligibility standards and expanding the content of care with a view to ultimately providing comprehensive services for substantially all individuals who met the State's financial eligibility standards. However, in December 1973 there was considerable variability among States. This paper, based on some of the findings of a broader study of Medicaid, focuses on two of the most used services, in-patient care and physicians' services, and three of the more heavily used optional services, dental care, eye care and prescription drugs. Data were collected by a personal interview survey of 3,000 cash welfare cases, encompassing more than 8,000 recipients. The results of the study leave little doubt that the presence of Medicaid does, other things being equal, clearly remove a significant financial barrier to the availability of health care services. In addition, the comprehensiveness of Medicaid appears to have a substantial effect on the use of each individual service. However, it is equally clear that serious shortages and/or maldistribution of provides and facilities can more than offset the benefits of programmatic coverage.

1293. ZIMMERMAN, H., BUECHNER, J. and THORNBERRY, H. **Prospective reimbursement in Rhode Island: additional perspectives.** *Inquiry*, Chicago, 1977, March, vol. 14, no. 1, pp. 3-16.

In a recent paper, a staff member of the United States Social Security Administration (SSA) presented the first public report, albeit in summary form, on SSA-sponsored evaluations of prospective reimbursement through budget review in New Jersey, Western Pennsylvania and Rhode Island. Dissemination of such results is important, but in that paper salient characteristics of each of the three experiments are obscured through the summary approach and there are a number of problems with regard to the Rhode Island results. In this paper, staff of Rhode Island Health Services Research Inc., describe the Rhode Island experience in greater detail, and the evaluation of the experiment as a cost control programme is presented within the validity of the conclusions that can be drawn from it. The paper is in three parts: (i) a description of the

participants in the experiment, the history of the movement towards a cost control programme and a description of the programme itself as it evolved during the period of the experiment; (ii) the methods used to evaluate the cost control aspects of the programme, the problems encountered in this evaluation, the results of the several studies carried out and a discussion of the validity of the conclusions indicated by these results; and (iii) summary of the conclusions and discussion of the needs of future experiments in cost control.

SUPPLIES AND STORES

PURCHASING

1294. HOUSLEY, C. **Making the most of your suppliers.** *Dimensions in Health Service*, Toronto, 1977, April, vol. 54, no. 4, pp. 18, 20.

Hospital supply services are negotiable items and terms must be adequately defined in writing to prevent possible misunderstanding. Of chief importance among the service aspects is supply availability upon request. Hospitals should put the burden of warehousing onto the supplier. The need for a penalty clause to provide suppliers with an incentive to honour the agreement is discussed. Suppliers have access to much valuable information that can be of use to the supplies officer when forecasting and projecting need. Product activity reports should be established. Suppliers can be used as educational resources to inform the supplies officer of new material and methods that could be of use. The need for an ethical and open relationship based on integrity and honesty is discussed, and by using the supplier improved efficiency and lower costs can be obtained.

STORES

1295. RÜDEN, H. Krankenhaushygiene: Die Lagerfähigkeit von verpacktem Sterilgut. **[Hospital hygiene: shelf-life of packed sterile goods.]** *Krankenhaus*, Stuttgart, 1977, April, vol. 69, no. 4, pp. 145-148.

Sets of sterile goods in nine different packagings (paper from two manufacturers) were tested for sterility over a period of 55 weeks. Sets were stored in air-conditioned and non-air-conditioned rooms, in the external air and in air-conditioned stores with a high relative humidity. In the rooms sterility was maintained for a minimum of 35 and a maximum of 55 weeks. In the external air, with considerable variations (up to saturation limits) in humidity, sterility was maintained for a minimum of only 20 weeks. Storage in air of saturated humidity resulted in loss of sterility from the start of the experiment. On the basis of these experiments storage periods of up to six months can be recommended as long as moisture formation on the packaging material is prevented and relative humidity is limited to physiological values of less than 80 per cent.

CATERING, DIETETICS, KITCHENS

HOSPITAL CATERING

1296. FEE, T. and WILSON, E. **Ready foods provide opportunity to improve service flexibility.** *Hospital Administration in Canada*, Don Mills, 1977, April, vol. 19, no. 4, pp. 16, 18-24, 26-27, 30.

Hamilton Civic Hospitals, Ont., re-evaluated all aspects of hospital administration

and care in an attempt to maintain the level of patient care while living within their budgets. The catering department is both labour intensive and responsible for a significant percentage of the hospital's budget. Consequently all aspects of food purchasing, handling, preparation and distribution using a cook-freeze food service or ready-foods system were integrated in one hospital. Various food systems were compared and food production was established on a volume production method using standardized recipes. Meal assembly service is a conventional centralized belt-line service with hot and cold food delivered to the patients via cart. The organizational methods used in the catering department are discussed. The need to study each project and make decisions on the merit of each institution is emphasized.

DIETETICS IN THE HOSPITAL

1297. EVANS, E. **Special diets in hospital.** *Nursing Times*, London, 1977, May 26, vol. 73, no. 21, pp. 795-797.

If the general standard of feeding in hospitals falls short of the best, one might expect that the situation for specific dietary needs would be better. A survey was carried in two London teaching hospitals and two provincial hospitals. Each hospital was equipped with a diet kitchen and employed at least one qualified dietitian. The food intakes of 40 patients were examined by weighing and recording everything the patient ate for up to seven consecutive days. The results are presented in two tables and discussed by type of diet: unquantified, energy-restricted, low carbohydrate, low protein and sodium restricted. The study demonstrated very clearly that many patients do not receive or eat the special diets prescribed for them. The discrepancies are greater for diets which leave the patient hungry or where palatable items are removed from the diet; patients are tempted by items which can be bought from the mobile shop. But the blame for failing to keep to a special diet does not rest with the patient alone. A chain of people is involved between the prescription of a diet and its consumption. Nurses should receive more nutrition education and be trained to observe and report on the feeding behaviour of their patients.

LAUNDRIES AND LINEN SERVICE

LAUNDRIES

See also Abstract No. 1307

1298. LYLIUS, J. M. **A marriage between government and private enterprise.** *Power Laundry & Cleaning News*, London, 1977, May 13, p. 33.

About 80 per cent of Dutch laundries are commercially owned, the remainder being small hospital laundries often in the grounds of the older psychiatric institutions. As the demands for a domestic laundry service have declined, the laundry work load from hospitals has increased. Hospital boards have tended therefore to put their laundry in the hands of the commercial laundries through long-term contracts. There was, however, some concern with regard to standards and a study was undertaken by the Central Organization for Applied Specific Research at the instigation of the Netherlands

Launderers' Association and the Dutch Hospital Institute. As a result a rationalization of the commercial laundries has taken place, standards have been laid down and a licensing system established.

1299. **A hospital laundry for the future.** *Power Laundry & Cleaning News*, London, 1977, May 13, pp. 36-37.

The new hospital service complex in Canberra is set in 22 acres of a new developing industrial area. It consists of boiler house/workshop, central linen service, central sterile supply service, vehicle workshop and (still under construction) a central warehouse. The central linen service building covers 50,000 square feet and has two mezzanine floors. One of these of 11,150 square feet, is mainly taken up with air handling equipment; the second, of 8,650 square feet, is used for soiled work sorting and is immediately above four tunnel washers allowing for gravity feed. The soiled bag handling system has a capacity for 2,500 bags. Brief details are given of the equipment, which is designed to handle the work from hospitals with a total of 1,500 beds; this capacity could be doubled without any structural alterations. There are six internal (and one external) photographs of the laundry.

1300. MITCHELL, J. **Hospital laundering from the supplier's point of view.** *Power Laundry & Cleaning News*, London, 1977, May 13, pp. 24-25.

The author, managing director of a laundry equipment supply company, believes that the hospital laundry set-up has to be a compromise between the need for infection control allied to good laundering standards with minimum shrinking, and meeting patients' requirements, and pragmatism bearing in mind the current availability of machinery suited to the kind of installation required. The laundry manager will wish to reduce patients' personal laundry to a minimum. The author describes briefly installations at two hospitals and a children's home to deal with this type of work. The alternative is to develop a small laundry unit within the laundry complex.

1301. PULFREY, A. **Running a personalised scheme.** *Power Laundry & Cleaning News*, London, 1977, May 13, p. 21.

Middlewood Hospital, Sheffield, has found that a numbering system for personal laundry does not work at ward level. Items are now permanently marked on sewn tape with both name and ward. Each ward records issues in a ring binder containing an individual card for each patient. The laundry keeps a further set of cards in an alphabetical system for cross-checking purposes. Underwear is regarded as foul linen and therefore bagged for sending to the laundry. A personalized recording system is used for normal outer garments and a net bag system for stockings and tights. Personal clothing needs its own flow lines and at Middlewood Hospital a launderette-type system has been developed using eight washing machines, six 16-pound tumbler dryers and a 30-pound tumbler, with a 50-pound washing machine, extractor and tumbler for foul linen.

1302. TAYLOR, H. W. **Essential features of a personalised clothing system.** *Power Laundry & Cleaning News*, London, 1977, May 13, p. 19.

It is argued that a personal laundry bundle system for long-stay patients is impossible. It is necessary to find out what ward nursing staff regard as the optimum and what they

are prepared to accept as a minimum. A draft scheme can then be drawn up for discussion with nursing and administrative staff. A total scheme must provide: (i) for every patient to be able to purchase clothes; (ii) clear and concise advice to the patient as to what is suitable for handling by the hospital's laundry and dry cleaning facilities; (iii) equally clear advice on what is not suitable; (iv) very careful training of ward and laundry staff; (v) adequate storage space at ward level; (vi) clear directions as to who shall prepare or oversee the preparation of laundry lists; (vii) provision for the incontinent patient; (viii) a bulk-purchasing system controlled by the supplies officer in liaison with the linen services manager; (ix) a system which covers bulk purchasing, retail sales and arbitration in case of dispute; (x) provision of launderette facilities for use by suitable patients; (xi) a permanent marking system; and (xii) provision for re-marking when a patient moves between wards or hospitals.

HOSPITAL LINEN AND TEXTILES

See Abstract No. 1349

HYGIENE IN THE HOSPITAL

See also Abstract No. 1253

1303. THIMM, B. Welche personellen, betrieblich-organisatorischen und baulich-funktionellen Voraussetzungen sind für eine optimale Krankenhaushygiene notwendig? **[What personnel, administrative and structural-functional conditions are necessary for optimum hospital hygiene?** *Krankenhausartz*, Karlsruhe, 1977, April, vol. 50, no. 4, pp. 407-408, 410-414, 417-421.

During the course of an outbreak of streptococcal infection at Ulm University Hospital in February 1975 attention was drawn to one of the basic problems of hospital hygiene: the increasing incidence of hospital infections in both sporadic and epidemic forms. The causes, which are many, are discussed in detail. Of particular importance are the deficiencies in hygiene in the staff/management and structural/functional sector. These include poor communication between disciplines, general neglect of hygiene, faulty or inadequate organization of hygiene, and defective planning of hospital building and wards. They also include new technological and therapeutic resources such as the use of immunosuppressive and cytostatic drugs, corticides, and broad spectrum antibiotics as well as general abuse of antibiotics. A number of proposals for improving hospital hygiene are put forward, in particular codification of hygiene requirements for hospital construction.

HOSPITAL INFECTIONS

1304. ROBERTS, A. M. and STEER, P. J. **Bacterial motility and intrauterine catheter-borne infection.** *British Journal of Obstetrics and Gynaecology*, London, 1977, May, vol. 84, no. 5, pp. 336-338.

It has been suggested that monitoring of uterine activity by placement of intrauterine catherers can cause an increase in maternal and fetal infection. This paper describes experiments designed to calculate the probability of a motile bacterium traversing a standard intra-uterine catheter over a period of 24 hours. It was found that the risk of

infection occurs primarily during placement of the catheter, although a risk also exists if bacterial nutrients are present in the fluid filling the catheter. These risks can be minimized by: (i) not following the common practice of checking correct placement of the catheter by allowing amniotic fluid to drain from the catheter, displacing the sterile saline, or by replenishing the saline immediately; (ii) placing a loop in the catheter to trap air bubbles which might carry bacteria; (iii) flushing blocked catheters via a micropore bacterial ultrafilter between the pressure transducer and the patient, not across the transducer; and (iv) using a full aseptic technique during the initial placement of the catheter.

SOURCES OF INFECTION

See also Abstract Nos. 1304, 1306

1305. DIETRICH, M. Patienten mit erhöhtem Infektionsrisiko. **[Patients with a high risk of infection.]** *Krankenhausartz*, Karlsruhe, 1977, April, vol. 50, no. 4, pp. 345-347.

The expected reduction in the hospital infection rate resulting from the introduction of antibiotics in the 1940s has not materialized. One of the reasons for this is the fact that the number of patients at risk from infection has increased. To eliminate this cause, or at least to reduce the infection rate (and mortality), by preventive measures it is necessary to define groups of patients with a high infection risk: such high risk patients are found in all specialities. This paper deals specifically with infection risk in paediatrics, anaesthesia, surgery and general medicine. The numbers of patients at risk has increased markedly in recent years since diagnostic and therapeutic measures for maintaining vital functions have become more and more extensive with a concomitant effect on defence mechanisms.

PREVENTION AND CONTROL

See also Abstract No. 1305

1306. KANZ, E. Transmission von Mikroorganismen im Krankenhaus. **[Transmission of micro-organisms in the hospital.]** *Krankenhausartz*, Karlsruhe, 1977, April, vol. 50, no. 4, pp. 334, 336-338, 340-342.

The starting point of every hospital infection is the site at which the causative organisms proliferate. The most important sources of infection are patients, reservoirs for micro-organisms, and nursing staff. A knowledge of infection routes is essential if hygienic measures for the control of hospital infections are to be successful. The transmission of micro-organisms must be understood and made impossible by means of antiseptic and aseptic measures. Specially important are the operating theatre and the intensive care unit. The most important micro-organisms are *Klebsiella*, *Pseudomonas*, *Proteus* and, occasionally, *Escherichia*.

1307. MCKAY-FERGUSON, E. and MORTIMER, P. P. **The permeability of soluble laundry-bag material to bacteria and viruses.** *Journal of Applied Bacteriology*, London, 1977, April, vol. 42, no. 2, pp. 151-155.

A method is described for testing the ability of soluble laundry bag material to

contain *Escherichia Coli* and poliovirus. The problems of simulating real-life situations and the damage laundry-bags might receive in use are discussed. Under experimental conditions the bacteria or virus particles were liable to inactivation, by heat or toxic substances from the laundry-bag material, in the sodium chloride solution, or on the containers. Two types of material were tested, but only one presented a significant barrier to *E. coli* and poliovirus. The advantages soluble laundry bags have over alginate-stitched polythene bags are discussed.

AIR HYGIENE

See Abstract No. 1243

DISPOSAL OF WASTE

1308. GIESE, H.-J. Müllentsorgung im Krankenhaus. **[Waste disposal in the hospital.]** *Krankenhaus*, Stuttgart, 1977, March, vol. 69, no. 3, pp. 102-105.

The disposal of hospital waste is discussed under three main heads: collection; transport; and final disposal. While normal 'domestic' waste can be disposed of either by removal to a municipal dump or incineration (either at the hospital or at a central plant) infectious and surgical waste must be incinerated. Various systems for baling paper and compressing containers are outlined. During the past seven years the cost of waste disposal via the municipal system has doubled to DM 100 per tonne. For a 700-bed hospital waste disposal partly via the municipal system and partly by incineration cost DM 170,000 a year. More recently a modern automatic incinerator plant has been installed for all waste: this is less labour-intensive and, taking into account the value of the heat generated and used, the cost is little more than DM 50,000 a year.

SAFETY MEASURES

1309. SPRAGUE, J. G. **Commonsense approach needed in dealing with safety.** *Hospitals*, Chicago, 1977, Feb. 1, vol. 51, no. 3, pp. 67-68, 70, 72, 74-75.

The majority of hospitals in the United States are extremely conscious of the need to comply with the large number of codes and standards issued to them from all levels of government. The complexity of codes and the variation of standards can lead to inconsistent application. The costs of implementing the various codes are discussed. Hospitals vary in design and codes that are relevant and beneficial for one type of hospital often do not fit the needs of another. The statistics for fires and deaths by fire in hospitals are examined. Some of the greatest problems focus upon retroactivity of application. Recent recommendations are outlined. The problem with so many different standards is overlapping and redundant requirements placed upon one hospital area by several codes. The American Hospital Association is now advocating a more realistic code structure and has gained appointments on 14 of the code writing committees. The need to recognise that there are many ways of developing a safe environment is considered.

FIRES AND FIRE PREVENTION

1310. KRUEGER, L. J. and PATTON, R. M. **More fire safety can cost less.** *Hospitals*, Chicago, 1977, Feb. 1, vol. 51, no. 3, pp. 127, 130, 132.

The University of Kansas Medical Center, Kansas City, has planned a new clinical care facility to be linked to the existing clinical facility by closed pedestrian passageways and an underground tunnel supplying the engineering services. The seven-storey building covers an area of 330′ by 360′. Permanent elements of the building are the frame, walls, floors, roof, lifts, and mechanical, electrical and plumbing systems. The building has a concrete foundation, a structural steel column and truss frame and a concrete floor system. It is enclosed with glass and precast concrete exterior walls. Heating and ventilation are provided by a dual-duct system. An economical fire safety plan has been developed. Sprinklers have been installed throughout the building, allowing a major reduction in the amount of above-the-ceiling, spray-on fireproofing required. The composite plan saved more than 50 per cent of the $10 million in fire protection innovations indicating the degree to which fire codes affect construction costs. Old fire safety concepts are compared with new ideas. The new sprinkler system and composite plan are based on the following concepts: (i) the contents of a building, not the structure, are the major fire problem; (ii) the only solution to a contents fire is to put it out; and (iii) a system that terminates a contents fire also protects the structure. The advantages of the system are: (i) reduced building construction costs; (ii) greater freedom of interior design; (iii) reduced maintenance costs; (iv) protection for occupants; (v) use of economical and useful construction materials; and (vi) a possible renaissance in architecture.

PLANNING FOR MASS EMERGENCIES

1311. HILL, R. W. and BARNECUT, R. J. **Earthquake-resistant hospitals: some cost considerations.** *Hospitals*, Chicago, 1977, Feb. 1, vol. 51, no. 3, pp. 119-120, 122.

As the United States becomes increasingly more urban it is inevitable that a major earthquake will occur in a built-up area. The effect of the 1906 San Francisco earthquake is outlined. The effect of recent earthquakes has been to increase legislation and directives for earthquake-resistant design in hospitals. The increased costs that occur as a result of these changes in design raise the issues of: is the increased cost worth it; and what is the cost premium now compared with what it was before. Costs increase in three areas: more elaborate design services; increased construction costs; and increased administrative costs. These costs are examined in relation to the legislation in the State of California. The new legislation has dramatically affected design criteria and although hospitals designed according to these criteria have yet to be tested by real events it is felt that a prudent step forward has been made.

1312. LEFORT, S. **Ready for any emergency: 200-bed hospital-in-a-box.** *Canadian Nurse*, Ottawa, 1977, May, vol. 73, no. 5, pp. 45-47.

The Emergency Health Division of the Medical Services Branch of Health and Welfare Canada provides a range of special disaster equipment to hospitals with

approved disaster plans. On a larger scale is the 200-bed emergency hospital which is a completely functional hospital that can be used anywhere that the need occurs in Canada. When the Stanton Yellowknife Hospital was burned to the ground a portion of the emergency hospital was flown there, assembled within four hours of its arrival and used for seven months. The hospital equipment is packed in 594 boxes designed for long-term storage. The total weight is 42,000 pounds and it takes two 40-feet vans, one freight car or one Hercules plane to transport it. It is self-sustaining for seven days and would probably be assembled and function in a school or similar building. It comprises 10 wards, three operating theatres, central supply room, pharmacy, laboratory, blood donor kit, X-ray unit, generator and utilities area.

1313. LECHAT, M. F. Epidémiologie des cas d'urgence. **[Epidemiology of emergencies.]** *Acta Hospitalia*, Leuven, 1976, vol. 16, no. 4, pp. 305-332.

With a wealth of practical instances drawn from the literature the author sets out to illustrate the value of applying epidemiological methods to the planning of emergency services for individual (acute illness, injury) and general (natural or man-made) disasters. Because the precise nature of each emergency cannot be foreseen a standardised approach must be devised which is applicable in most cases. The author examines the effects on outcome of the time lag between summoning help and the patient's arrival at the hospital and describes epidemiological studies of mortality rates in road accidents, the ratio of dead to injured in different types of disaster, the incidence of emergencies, variations in the number of road accidents at different times of the day or week, risk factors, and the use of mathematical models. The article is illustrated with five graphs and seven tables and it is shown that a rational and efficient emergency service must be based on the use of a good information system.

1314. RECCARDINI, F. L'ospedale di Udine nell'emergenza provocata dal terremoto: problemi organizzativi. **[The hospital at Udine in the emergency caused by the earthquake: problems of organization.]** *Ospedale*, Torino, 1977, March, vol. 30, no. 3, pp. 43-49.

With the help of three maps, nine tables, and two graphs the author traces the involvement of Udine hospital in the treatment of those injured in the Friuli earthquake in May, 1976, and discusses the lessons which can be learnt for the future. Of the 3,000 persons injured in the disaster 1,119 were treated at Udine. The hospital had no emergency plan and the emergency department was not large enough. Because each patient did not have a form giving details of his injuries, the injured were admitted directly to the wards without the hospital knowing whether urgent treatment was required or not. On the other hand, the radio link with the ambulance service was invaluable, as was the proximity of the hospital to the heliport and the help of the regional radio hams who worked day and night during the emergency in the areas where conventional modes of communication had broken down. Central points for information, pharmacy, and voluntary workers were established in the hospital, and doctors and nurses were seconded from other hospitals inside and outside the region.

THE PATIENT

WELFARE OF THE PATIENT

See also Abstract Nos. 1339, 1353, 1370

1315. FREEDMAN, T. and MAPA, J. **Humanization at Mount Sinai.** *Dimensions in Health Service*, Toronto, 1977, April, vol. 54, no. 4, pp. 21-23.

Mount Sinai Hospital, Toronto, aims to treat patients with dignity, respect, kindness and consideration. This philosophy has been established by the hospital board and administrative staff who have set standards of care that emphasize a humane approach to patient care through concern for the overall needs of the patient. The volunteer services play an integral part in the concept of personal care, and a patient representative scheme has been established. Emphasis is placed on providing for the needs of both Jewish and Gentile patients. An ad hoc committee for the care of the terminally-ill reviews the quality of care provided. A multi-disciplinary approach is used to evaluate the total needs of the patient and to work towards them. Community organizations have been provided with free office space in the hospital so that they are more accessible to patients. Interpreter services are provided by volunteers and staff in over 45 languages and a library has been established for non-English speaking patients. The direction indicator system is being redesigned throughout the hospital. There are also in-service training schemes for staff to help them in any possible stress situation.

1316. EKLÖF, B. and others. Sjukhusartotek ger bättre patientmiljö. **[Hospital picture lending library service to patients helps to provide a better environment.]** *Landstingens Tidskrift*, Stockholm, 1977, April, vol. 64, no. 4, pp. 28-30.

A trial two-year period in which the library at Lund Hospital operated an 'artotheque' (a picture loan system) has ended with the conclusion that the system is an excellent aid towards improving the environment. Many patients who cannot utilise the other facilities available find new interests awakened by this service, and the staff have a highly positive attitude to the artistic enrichment of their place of work. The County has granted s.kr. 6,000 (£1000) a year towards the purchase of pictures; the Provincial Art Centre has lent out various collections, and in the Spring of 1976 the range was extended by the provision of a series of photographs. Colour photographs of every item on loan are collected in groups on large display sheets bound in an album, and the work selected is hung in the patient's room. The work of framing and cataloguing was very demanding, and the system has had to be limited to one or two wards. A fully developed art loan service would cost s.kr. 20,000 to 30,000 (£3,000 to £5,000) a year. For s.kr. 15,000 (£2,500) it would be possible to purchase forty or fifty works for one ward. Given a write-off period of 10 years, it would cost s.kr. 1,500 (£250) a year to provide an art service for that ward. In view of the fact that the department of surgery currently costs s.kr. 1,000 (£167) a day per patient, and is shortly expected to top s.kr. 1,500 (£250) a day, the price of an artotheque is comparatively low.

1317. GRENIER, R. L'infirmier et le client anxieux. **[The nurse and the anxious patient.]** *Infirmière Canadienne*, Ottawa, 1977, May, vol. 19, no. 5, pp. 16-19.

The author describes the physiological and psychological changes induced by anxiety and reproduces Graham and Conley's list of the 26 indications of anxiety.

The nurse can help to reduce her patient's level of anxiety to within tolerable limits by explaining his treatment to him beforehand, by providing emotional support during treatment, by explaining any changes in the way a task is carried out, by respecting the patient's modesty, by attending to his needs as an individual, and by avoiding the making of unhelpful remarks in the patient's presence.

VOLUNTARY SERVICE, VOLUNTARY WORKERS

1318. WEVER, A. de. Le volontariat dans les hôpitaux. **[Voluntary work in hospitals.]** *Hôpital Belge*, Bruxelles, 1977, March/April, vol. 20, no. 126, pp. 57-59.

The author defines the principal task of the voluntary worker in the hospital as the improvement of the patient's psychological state. Voluntary workers should be stable personalities, physically active and with a desire to serve others and a willingness to accept hospital discipline and ethics. Their presence is most valuable in the out-patient department and at the admission of a new patient, particularly if the admission is an emergency when they can be of assistance to the patient's family as well as to the patient himself. Voluntary workers can also run libraries and mobile shops. They can, however, only function if the paid hospital staff agrees, and it is the task of the management to make sure that the latter are willing to accept the help of voluntary workers.

HOSPITAL CARE

See also Abstracts Nos. 1224, 1238, 1248, 1254-1259, 1343, 1354

1319. PINEAULT, R. Rationalisation de l'évaluation et du contrôle dans les organismes de santé. **[Rationalization of the evaluation and control of health institutions.]** *Administration Hospitalière et Sociale*, Montréal, 1977, March/April, vol. 23, no. 3, pp. 14-26.

A rational system of assessment of the quality of care must include three parameters: structure, process, and results. By structure is meant the size of the establishment, its staffing, equipment, availability of doctors, etc. Assessment of the process should include the analysis of statistics and the examination of records in cases where there is a departure from the statistical norm, and the study of particular records which may reveal specific inadequacies and errors. Monitoring of results should be based on the identification of the population served and the population treated, tracer studies of some diseases, and the analysis of poor results.

1320. WOOD, T. J. and PALMER, G. R., editors. **Medical audit: dirty words or sound practice? Report of a symposium held at the Prince of Wales Hospital on 8 July 1975.** (Australian Studies in Health Service Administration No. 28) Kensington, N.S.W., University of New South Wales, School of Health Administration, 1976, vi, 80 pp.

This monograph was compiled from papers presented at a seminar held at the Prince of Wales Hospital, N.S.W., July 1975. Two papers discuss the definition of quality assurance programmes and the reason for them. There are four papers on why a Q.A.P. should be conducted, concerning hospital accreditation, administrative

and clinical aspects, and government views. A further three papers deal with computer based auditing in a radiology department, medical auditing in a gastro-enterology department and medical auditing on data utilization. A final paper covers proposed systems of record keeping and computerized information management to assist medical audits. The papers are all concerned with Australian experience of auditing systems though there is also some reference to American practice. There is a bibliography of 20 items.

1321. HÄRING, H. Die Innenrevision im Krankenhaus. **[Internal auditing in hospitals.]** *Krankenhaus Umschau*, Kulmbach, 1977, April, vol. 46, no. 4, pp. 228, 233-238, 241-243.

This paper lays down guidelines for the carrying out of an internal assessment by West German hospitals of their performance in relation to their goals. This is a necessary preliminary to the inspection by the appropriate authority to determine the cost per patient day to be allowed under recent hospital legislation. This internal assessment covers organization, performance and financial results.

1322. LASDON, G. S. and SIGMANN, P. **Evaluating cost-effectivesness using episodes of care.** *Medical Care*, Philadelphia, 1977, March, vol. 15, no. 3, pp. 260-264.

To test the feasibility of defining episodes of care as a cost-effectivesness measure, a pilot study was carried out in conjunction with an on-going quality assessment programme at Hahnemann Medical College and Hospital, Philadelphia. The programme involved abstracting prospective data from charts of patients treated for hypertension in the primary care clinic. For comparison, data were abstracted retrospectively on hypertensive patients treated by faculty general internists in a fee-for-service private practice. The 12-month course of each patient was divided into controlled and uncontrolled episodes for which frequency rate and mean laboratory test use was calculated. Patient cost for each type of episode in each setting was calculated using standard charges. Results indicated that episode definition is feasible and provides a measure for preparing cost-effectiveness of different delivery systems treating the same health care problem. Factors omitted from the study that could affect cost-effectiveness are also discussed.

1323. SCHWARTZ, P. Normalisatie in Nederlandse ziekenhuizen voorbeeld voor Duitstalige landen. **[Standardization in Dutch hospitals: an example to the German-speaking countries.]** *Instelling-Management*, Den Haag, 1977, April, no. 4, pp. 71, 73.

The paper is the report of a speech by the author (Dr. Schwartz, Düsseldorf) at the Swiss Hospital Congress in Davos. In the German-speaking countries control of efficiency and quality of medical services, including standardization, is still unsatisfactory. As examples of systems abroad are mentioned: (a) the Medical Registration Centre in Utrecht, Netherlands, where by voluntary participation of Dutch Hospitals patients' data are centrally registered and made available on request for discussion by hospital medical committees; (b) the PAS (Professional Activity Study) in Michigan, USA, whereby hospitals provide coded reports of patients within 90 days of discharge and receive in return regular reports of all patients' diagnoses

and treatments; a Medical Aid Programme within the framework of PAS issues detailed lists for specialists departments for discussion; and (c) the PSRO (Professional Standard Review Organization), USA, a voluntary organization for control of medical quality on regional level. In the Federal Republic of Germany storing of medical data is carried out through co-operation between the principal hospital organizations and the Social Research Institute 'Infratest'. This could form a base for development of evaluations of medical services. Standards to be introduced however should develop within the organizations and not be imposed by Government or used as attempts to discipline medical staff. The present decentralized organization of hospital staffing will create problems for central standardization, but the speaker calls for its introduction following the Dutch and American examples.

DISCHARGE OF PATIENTS

1324. McWILLIAM, R. and FARQUHAR, J. W. **Assessment of a new hospital discharge sheet in paediatric practice and of parental reliability in delivering it.** *Health Bulletin*, Edinburgh, 1977, May, vol. 35, no. 3, pp. 115-118.

Communication between consultants and general practitioners, and doctors and other members of an Integrated Child Health Service often leaves much to be desired. A discharge sheet has been structured to ensure that the family doctor knows when the patient left hospital, the diagnosis reached and the information given to the patient. The discharge sheet, produced by the Royal Hospital for Sick Children, Edinburgh, has saved registrar and secretarial time in hospital and has been acceptable to recipients. Parental reliability in delivering the sheet to the family doctor has been checked and recommendations made.

HOME CARE, AFTER-CARE

See Abstract Nos. 1360-1362

SPECIAL DEPARTMENTS

WARDS

See Abstract No. 1353

PHARMACY

See also Abstract No. 1257

1325. CARNEVALI, O. and others. Analisa di alcune tendenze della spesa per farmaci dell'ospedale generale regionale di Perugia dopo l'introduzione del prontuario terapeutico ospedaliero (1973-1976). **[Analysis of some trends in expenditure on drugs at the Perugia regional general hospital after the introduction of the hospital treatment manual (1973-1976).]** *Ospedale*, Torino, 1977, March, vol. 30, no. 3, pp. 50-55.

Expenditure on drugs rose between 1969 and 1972 in 14 out of 18 clinics and departments in the regional general hospital in Perugia but, although the costs of individual

items rose, between 1972 and 1975 overall expenditure fell in 13 out of 24 clinics and departments. The variations in expenditure on drugs between 1969 and 1976 in 14 departments are illustrated in a series of 28 graphs. Analysis of expenditure showed that after the introduction of the hospital treatment manual in 1972 drugs of little or no therapeutic value were withdrawn and the generic rather than the trade name of a drug was used on prescriptions. The greatest reductions in expenditure were achieved in those departments in which the generic term for the drug was always employed, where a prescription form requiring care and accuracy on the part of doctors and nurses was in use, and where the staff were directly involved in the problems of costs, either by participating in the collection of information on drugs and therapeutic standards, or as members of the manual committee.

1326. McCabe, J. C., Henry, D. A. and Lawson, D. H. **Drug information centres: new role for pharmacists?** *Scottish Medical Journal*, Edinburgh, 1977, April, no. 2, pp. 147-150.

There are two different types of drug information centres in Scotland. The specialist Poisons Information Bureau in Edinburgh, open to all practitioners in Scotland, provides a 24-hour information service on all common and most uncommon drugs or chemicals which may lead to poisoning. Other centres have opened recently in Glasgow, Dundee and Edinburgh, confined to office hours and giving information on topics other than poisoning. The Glasgow Drug Information Centre, funded by the Greater Glasgow Health Board and located in Glasgow Royal Infirmary, serves hospital physicians, group practitioners and pharmacists, but over 85 per cent of enquiries came from hospital staff, over a specified period in 1976. One fifth of enquiries concerned adverse drug effects and nine per cent concerned interactions. In general, two-thirds of enquiries were completed within one hour of receipt, and a further quarter within three hours. A drug information centre with sufficient literature and staff, can provide rapid information on many drug topics and help to increase awareness of the complex nature of modern drug therapy.

1327. Michael, L. and Felis, W. Arzneimittel-Dokumentation in der Klinik-Apotheke. **[Drugs documentation in the hospital pharmacy.]** *Krankenhaus*, Stuttgart, 1977, March, vol. 69, no. 3, pp. 82-83.

A simple system for filing drug information, suitable for hospital pharmacies, pharmacists' shops and medical practices, is described. Material is filed in four categories. Information on individual drugs is maintained in suspended files; files are kept for each of 86 different indications; pamphlets and brochures are classified according to their indication group; and collections of literature supplied by individual manufacturers are kept together. The system makes it possible to retrieve the required information very quickly and makes the correct filing of new material a simple procedure.

1328. Lambert, R. L. and others. **The pharmacist's clinical role as seen by other health workers.** *American Journal of Public Health*, Washington, 1977, March, vol. 67, no. 3, pp. 252-253.

A survey was devised in Minnesota to discover the reaction of other members of the health team to clinical pharmacy. The question was asked whether pharmacists

do or should perform the following functions: (i) prescribing drugs; (ii) dispensing and administering drugs; (iii) documenting professional activities; (iv) being directly involved with the patient; and (v) reviewing drug use. The respondents believed in general that the pharmacist was actually performing only the last function and they felt he should perform all the others, except prescribing. The study shows that efforts to incorporate more clinical services into the practice of pharmacy have not been very successful, for the following possible reasons: (i) unawareness of what other health workers regard as the pharmacist's domain; (ii) lack of enthusiasm in cultivating new areas; (iii) lack of education in new responsibilities; and (iv) economic barriers. A cost benefit analysis should be carried out on clinical pharmacy services and pharmacists made more aware of the full scope of their profession.

LABORATORIES

1329. TUTTLE, L. S. **The advantages of full-service laboratory contracts.** *Hospital Topics*, Neptune, N.J., 1977, March/April, vol. 55, no. 2, pp. 16-19, 21.

Only large medical centres and teaching institutions are now able to provide comprehensive laboratory services through hospital-salaried physicians. Other hospitals have had to contract for services, the alternatives being limited to what the local contractor is willing and or able to provide. Two recent developments have expanded the alternatives greatly: (i) large, independent laboratories operating on a regional basis and using the economics of scale to offer a full range of tests, services and quality control programmes; and (ii) the full-service arrangement, whereby the independent laboratory performs all testing for its hospital client, assumes all equipment and operating costs, hires all laboratory staff and participates in all staff functions. The author has negotiated four full-service contracts with the largest independent laboratory contractor in the United States. On the basis of this experience he discusses the advantages of full service contracts, questions relating to control, relations between hospital and laboratory staff, and other considerations.

1330. MOREAU, C. and others. Le laboratoire de biochimie à l'hôpital et ses équipements. **[The hospital biomedical laboratory and its equipment.]** *Techniques Hospitalières*, Le Kremlin-Bicêtre, 1977, May, vol. 32, no. 380, pp. 45-76, 81-122.

In a series of 19 articles written by doctors, pharmacists, engineers, economists, and administrators, some aspects of the biochemical laboratory are examined. The activities and equipment of four large laboratories are described and problems relating to developments in equipment and techniques (economic aspects, staffing, reliability of results, maintenance and monitoring of equipment) and future trends (automation and control of laboratory expenditure in relation to total resources) are discussed.

DIAGNOSTIC X-RAY DEPARTMENT

See also Abstract No. 1283

RADIOTHERAPY DEPARTMENT

1331. EDWARDS, D. N., editor. **Workshop on computers in radiotherapy in Europe.** Held at the headquarters of the International Atomic Energy Agency, Vienna, 5-10 July 1976. (BIR Special Report 13) London, British Institute of Radiology, 1976, 2 vols. £5.80

This is a digest of original papers presented at a Workshop on the Use of Computers

in Radiotherapy and Oncology in Europe held at Vienna in July 1976. The fields for discussion covered the value of data processing with the computer in clinical records, radiobiology and treatment planning, together with the relevant computer technology. The discussions after the papers are included. There is an accompanying volume of abstracts of the papers delivered at the Workshop.

REHABILITATION

See Abstract No. 1363

OCCUPATIONAL THERAPY DEPARTMENT

See Abstract No. 1334

DEPARTMENTS FOR SPECIAL THERAPY

See also Abstract Nos. 1244, 1364

1332. ISAACS, B. **Five years' experience of a stroke unit.** *Health Bulletin*, Edinburgh, 1977, March, vol. 35, no. 2, pp. 94-98.

Of the four wards at Lightburn Hospital, Glasgow, re-opened as a geriatric unit in 1968, one is a stroke ward for patients of both sexes. During the five-year period under study, 587 patients who had recently had a stroke were admitted, drawn mostly from the general medical wards of Glasgow Royal Infirmary, and constituting a severely disabled group with a high prevalence of disorders of speech and perception. The average age of the patients was about 70, and 60 per cent reached the stroke ward within four weeks of the outset of their stroke. The ward provided a collaborative programme of rehabilitation which gave practical and psychological help to patients and their families and was of educative value to the health team. Of the patients studied, 53 per cent went home, 22 per cent died in hospital and 26 per cent were transferred to other wards. In most cases, independence was maintained after discharge and to help patients and their relatives three differing types of stroke clubs were formed.

1333. SHERIDAN, M. S., LIBERLES, K. and VOIGT, D. **Transferring dialysis patients.** *Dialysis and Transplantation*, Sherman Oaks, 1977, April, vol. 6, no. 4, pp. 56-58, 65.

Several types of haemodialysis facilities have been developed including: hospital units specializing in new and problem-patient dialysis; and chronic care or satellite centres, outside the hospital, where medically stable patients receive regular treatment. It has been observed, however, that the transfer from hospital to satellite unit is often stressful to patients. A study was made of 40 patients transferred from the University of Illinois Hospital and St. Joseph Hospital to a satellite haemodialysis centre. Data was collected by a social worker in interviews with patients. The results are presented in five tables and discussed. The transfer was rated as very difficult by five patients, somewhat difficult by 13 and not difficult by 22. In spite of initial difficulty, 22 patients reported a high degree of current satisfaction with the satellite. It is concluded that there is no clear way of diminishing the pain of transfer. A pre-visit or other preparations for transfer can be a help, but a patient should not be overwhelmed.

1334. STELLICK, L., HILTS, A. and ROTH, D. **Occupational therapy in a dialysis program.** *Dialysis and Transplantation*, Sherman Oaks, 1977, April, vol. 6, no. 4, pp. 51, 54.

The haemodialysis unit at Woods Veterans Administration Center, Milwaukee, Wis., has eight beds, a separate two-bed home training unit and two peritoneal dialysis machines which are used as needed. Occupational therapy has been an integral part of treatment since 1968. All patients are seen at the bedside during dialysis. After receiving the physician's prescription, the therapist completes an initial evaluation. The patient is then shown a list of available occupational therapy activities and is guided towards one which would be of benefit physically, psychologically, socially and vocationally/avocationally. Types of activities suitable for patients are listed under the headings: strength and endurance; range of motion; fine co-ordination; and increase of socialization.

1335. SCHEIBER, S. C. **Care of the terminal hemodialysis patient requiring psychiatric hospitalization.** *Dialysis and Transplantation*, Sherman Oaks, 1977, April, vol. 6, no. 4, pp. 42, 44, 46, 48.

Terminal haemodialysis patients requiring psychiatric hospital care present special problems; the literature on the subject is reviewed very briefly. A recent case of a terminal patient admitted to the 24-bed, short-stay psychiatric unit of the Arizona Medical Center is reported. Special diagnostic and management problems are discussed, and the following recommendations are made: (i) there should be regular meetings between the renal and psychiatric teams to discuss specific problems; (ii) the nursing team assigned to the patient should have regular meetings; (iii) the therapeutic community should be informed of the special medical problems of the chronically ill patient; (iv) the therapeutic community should deal openly with feelings related to a terminally ill patient on the ward; and (v) legal problems related to informed consent, guardianship, and the right to die should be worked out, whenever possible, before a patient is admitted to an in-patient psychiatric unit.

1336. HAMILTON, J. R. and others. **A detoxification unit for habitual drunken offenders.** *Health Bulletin*, Edinburgh, 1977, May, vol. 35, no. 3, pp. 146-154.

The growing problems of alcoholism and drunkenness is Scotland currently attracting much debate. A study to determine the feasibility of establishing a detoxification service attached to the existing Regional Poisoning Treatment Centre (RPTC) in Edinburgh Royal Infirmary and to evaluate the effectiveness of a detoxification assessment and referral service for socially deteriorated alcoholics was carried out on 100 patients who were physically addicted to alcohol. The methods used are discussed together with the characteristics of the subjects, admissions for detoxification and assistance and referral systems. The effect of the project on individual patients, existing staff and hospitals suggests that it is more appropriate to deal with habitual drunken offenders in a medical and rehabilitative framework based on detoxification centres. The results of the project reveal that such a change in management can be carried out successfully as far as the police, courts and prisons are concerned. It is recommended that detoxification be carried out in a medical environment with medical and nursing staff trained in psychiatry. Benefit to the patients can be expected

provided the detoxification unit works closely with with social workers and there is adequate hostel accommodation.

INTENSIVE CARE UNITS

See also Abstract Nos. 1230, 1238, 1284

1337. FROST, D. A., YANOWITZ, F. G. and PRYOR, T. A. **Evaluation of a computerized arrhythmia alarm system.** *American Journal of Cardiology*, New York, 1977, April, vol. 39, no. 4, pp. 583-587.

A prospective study of a computerized arrhythmia alarm was carried out in a coronary care unit during 200 patient hours of monitoring. The system consisted of: a NOVA 1210 minicomputer located in the Unit and used for short-term data storage and display; and a local terminal and a remote CDC 3300 computer system separately interfaced to the NOVA and used for permanent storage of electrocardiographic data in the computerized medical record of each patient. The system was designed to activate an alarm on the development of rhythm and conduction disorders. Study patients were simultaneously monitored by the computer system and a conventional analogue heart rate alarm system. All alarms generated by the two systems were evaluated. Of 79 computer alarms, 42 (53 per cent) were true positive alarms; during the same period there were 167 analogue alarms of which only 13 (eight per cent) were true positive alarms. In both systems, false alarms were primarily due to patient movement, but they occurred only 25 per cent as often with the computer as compared with the analogue system. These results indicate that computerized arrhythmia monitoring systems offer significant advantages over conventional monitoring techniques.

SPECIAL HOSPITALS AND UNITS

OUT-PATIENT

See also Abstract No. 1285

1338. SHAH, C. P., MACBRIDE, J. R. and LAMB, G. A. **Appointment systems: why does a patient not return?** *Canadian Journal of Public Health*, Ottawa, 1977, March/April, vol. 68, no. 2, pp. 148-153.

A study of patients who did not keep out-patient clinic appointments was undertaken at the Children's Hospital Medical Center, Boston, Mass. The appointment system has been completely computerized since 1968 with television terminals in each clinic. A study was made of samples of 300 patients who kept two consecutive appointments and 331 who did not. Patients were more likely to break their appointments if: (i) the interval between the two appointments exceeded two months; (ii) they had no private physician; (iii) their first contact with the hospital was through the emergency room; and (iv) they would have received supervisory care in their proposed visit. Patients were more likely to keep appointments when the possible consequences of non-attendance were more serious for their health. Of 108,137 appointments in one year, 25 per cent were broken and 19 per cent were cancelled. The second part of the study identified four distinct types of behaviour in appointment keeping for one year: (i) patients who kept all appointments; (ii) those who kept or cancelled

all; (iii) those who broke or cancelled all; and (iv) those who kept some, cancelled some and broke some. The fourth group constituted 25 per cent of the sample, 48 per cent of visits and 67 per cent of the patients who did not keep appointments.

1339. ISACK, A. G. **How to develop and publicize consumer education programs for ambulatory care facilities.** *Hospital Topics*, Neptune, N.J., 1977, March/April, vol. 55, no. 2, pp. 55-60.

There should no longer be any question that consumer education is a legitimate part of the cost of caring for the patient. It is generally recognised that health education programmes integrated into the services of health care facilities offer a potential for both cost containment and improved quality patient care. An effective consumer education programme for an ambulatory care facility must be planned by determining patients' needs, assessing the facility's strengths and creating goals with measurable objectives. A methodology for implementing the plan must be developed. Possible media include local newspapers, talks to local organizations, speakers from the staff, brochures, a patient information booklet, open days, and special staff to assist patients. Use of some of these media by Burke Ambulatory Care Center, Loyola University Medical Center, Maywood, Ill., is outlined.

1340. PEIRCE, T. H. and others. **A combined health department-medical school rural outpatient tuberculosis program.** *American Journal of Public Health*, Washington, 1977, March, vol. 67, no. 3, pp. 257-259.

In 1972 a system of general hospital and out-patient care for tuberculosis patients was started in Yolo County, California, run jointly by the University of California School of Medicine, the David School of Medicine and the Yolo County Health Department. The county is divided into two clinic areas and clinics are held bi-monthly. A large proportion of the patient care and education is undertaken by the public health nurse. The new system has the following advantages: (i, the period the patient spends in hospital has decreased significantly and takes place locally; (ii) out-patient care is as effective but costs less than a long stay in a sanatorium; and (iii) a scheme combining care by the medical school and the public health authority has proved beneficial to both.

1341. TROP, J. L. and GOLD, C. **Patient-to-patient contact: the outpatient as a therapeutic agent.** *Hospital & Community Psychiatry*, Washington, 1977, April, vol. 28, no. 4, p. 249.

The patient advisory and consultation team (PACT) is an organization of psychiatric out-patients at the Brentwood Veterans Administration Hospital in Los Angeles. In 1974 PACT started a scheme by which members were allocated to particular in-patients by a joint decision of patients and staff. They discussed with the patients the problems they held, or had held, in common, helped them to become familiar with the hospital and did much more to improve relationships between patients and staff. The scheme has continued to be successful.

CASUALTY AND ACCIDENT

See also Abstract Nos. 1312, 1313

1342. SANCHEZ, A., MARGAIRAZ, A. and PROVOST, M. À propos de la réforme des services d'urgence dans les hôpitaux de Paris: premier bilan de la nouvelle

organisation des urgences médicales de l'hopital Ambroise-Paré. **[On reforms made in the emergency services of the hospitals in Paris: first out-line report on the new medical emergency services of the Ambroise-Paré hospital.]** *Hôpital à Paris*, Paris, 1977, Jan./Feb., no. 37, pp. 29-31.

Recent changes in the organization of emergency services in France have meant the appointment in every hospital of a departmental head responsible for emergencies and admissions. Since March, 1976 the Ambroise-Paré Hospital has had a 20-bed admissions unit. Between 5 p.m. and 9 a.m. all urgent cases are admitted either to this unit or to the intensive care cardiology unit or the medical resuscitation unit; next morning those in the admissions unit are seen by a doctor from the resuscitation unit who decides whether they should be moved to another unit or discharged. In a five-month period after this re-organization the number of patients in the admission unit has more than tripled, but 65 per cent of these have been discharged within 24 hours. This more efficient use of the hospital's services has led to a reduction in bed occupancy in the medical sections of the hospital, with a consequent loss of revenue.

DAY HOSPITALS

See Abstract Nos. 1365, 1366

CHEST

See Abstract No. 1340

INFECTIOUS DISEASES AND ISOLATION

1343. SHANKEY, P. and EDWARDS, J. **Nursing patients with Marburg fever.** *Nursing Mirror*, Sutton, 1977, May 26, vol. 144, no. 21, pp. 16-18.

The Trexler isolator is the most effective means of separating the patient with Marburg disease from those treating him. This is a chamber of transparent plastic supported by a framework and with half suits at the side allowing staff access. It is ventilated by bacteria-filtered air and maintained at a negative pressure. An attached supply isolator is used to store the patient's needs, with an exit for the disposal of waste. All equipment must be destructable. Staff wear Tyvec suits when admitting a patient or disposing of waste, and cotton suits with disposable underwear during routine nursing care. Frequent sponging and mouth-washing is essential to the patient's comfort, and during the course of the illness regular observations are recorded. Routine throat swabs, blood, urine and faecal samples are taken, and the volume of liquid output if measured. Convalescence takes place in a cubicle, and then in the patient's own home, under regular medical surveillance.

CHILDREN

See also Abstract Nos. 1233, 1236, 1237, 1263, 1324

1344. OATES, R. K. and others. **A hospital-based community paediatric unit.** *Medical Journal of Australia*, Glebe, 1977, March 19, vol. 1, no. 12, pp. 400-402.

Children with multiple handicaps often require the services of a team of pro-

fessionals to ensure that they receive a comprehensive assessment. The Royal Alexandra Hospital for Children, Sydney, established a community Paediatric Unit, in January 1975, to overcome some of these problems. The current activities of the unit are: medical care of children attending a school for the physically handicapped; management of child abuse and training of professional and lay people; care for children at a local women's refuge; teaching; research; and comprehensive assessment of children with disorders of delayed development and mental retardation. The first year of the unit in the assessment of children is reviewed. One hundred and twenty-nine children were found to have multiple intellectual, physical and social problems needing a team approach to their assessment and the mobilization of a variety of community resources to provide their ongoing care.

GERIATRICS AND LONG-STAY

See also Abstract No. 1367

1345. RUTH, S. and RUDIN, S. E. **Geriatrics and the health care system.** *Hospital Administration in Canada*, Don Mills, 1977, April, vol. 19, no. 4, pp. 35-40.

In order to effectively meet the needs of the elderly in Canada it is necessary to develop continuity with health and social services. The basic aspects of ageing are considered. Baycrest Centre for Geriatric Care, Toronto, comprises five organizational components which provide a series of integrated services for the care of the chronically ill, and the older-patient population, delivered on an in-patient as well as out-patient basis. The five organizational units are located on one site and provide flexibility to treat residents and patients in a manner consistent with their medical, nursing and social needs. The system attempts to meet the ideals embodied in the various concepts and ideals of a continuum of care. The services provided are: acute care; home with support; senior adult centre; day care; sheltered residential care; day hospital; home for the aged; and rehabilitation-chronic hospital. The advantages of the continuum of service allows individuals to move from one facility to another and to be treated in the most appropriate and economical settings.

1346. BINI, V. Anziani e handicappati: elementi per una progettazione razionale. **[The elderly and the handicapped: factors for a rational projection.]** *Tecnica Ospedaliera*, Milano, 1977, March, vol. 7, no. 3, pp. 17-37.

The author discusses the ideal types, dimensions, and location of equipment in buildings for the use of handicapped and elderly, infirm persons, including those confined to wheelchairs. He deals with access to the building, types of flooring and floor coverings, stairs, lifts, lights, levels of door handles and light switches, balconies and terraces, the optimal height and type of furniture and equipment in bedrooms, kitchens, and bathrooms, electrical fittings, and doors and windows. The article is illustrated with a total of 69 diagrams.

1347. FELDMAN, J. and HUNDERT, M. **Determining nursing policies by use of the nursing home simulation model.** *Journal of Nursing Administration*, Wakefield, 1977, April, vol. 7, no. 4, pp. 35-41.

A nursing home simulation model has been developed to allow planners to choose from alternative staffing patterns, unit size and service scheduling on the basis of

simulated patient outcomes and cost benefits. This paper describes its use as a planning and development tool for a long-stay care facility, operated as a satellite of an urban university medical centre. The input data included patient census, nurse staffing, nursing salaries, capacity, demand profile, schedule of services, server preferences, task priorities and performance times. Nursing simulation and cost models were developed. Experiments were conducted on staffing levels, rigid versus flexible scheduling of services, census and operating policies, and charge rates and operating policies. The model proved extremely useful in the development of this facility.

1348. CALVERT, J. **The demand for hospital beds by the elderly.** In: Projects in economic and social statistics, edited by David G. Mayes, pp. 83-109. Exeter, Exeter University Press, 1976. £1.00

The reasons for the current difficulties of the National Health Service are discussed. The concept of need in the elderly is defined, together with the nature of the demand for health care resources and its supply. The three key variables which are components of the future demand for hospital beds are the future hospital admission rate, average length of stay and mortality rate. A scheme to establish projected demand by the elderly is outlined using economic models. The project reveals that: (i) the group of people that can make the largest claim, relative to their numbers, on health care resources, is increasing; (ii) the proportion in each age group of which the over 65 group is composed is continuously changing; (iii) if the present fraction of need satisfaction is to be maintained, the supply of hospital beds will have to be increased in the proportions computed; (iv) it is essential to take a long-term view but to modify the short-term supply within this view; (v) it is the number of beds occupied by the 85+ group that will increase most in proportion; and (vi) the increase in the proportion of people within higher age groups, particularly in the proportion over 85, will bring about an increase in demand for geriatric unit beds far greater than the increase in demand for beds in other departments. It is recommended that a policy integrating all the fields of care for the elderly should be developed.

1349. CLULOW, E. E. **Textiles and the long-stay patient.** *Power Laundry & Cleaning News*, London, 1977, May 13, pp. 25-31.

The Shirley Institute has been involved with clothing for the long-stay patient since 1969. The major result of this work was the publication in 1972 of a catalogue of over 200 garments for the handicapped and disabled. There is now quite a wide selection of styles and designs in outerwear for handicapped women, but in underwear the possibilities are much more restricted. Choice of fibre is discussed, with particular reference to laundering requirements. Attention is drawn to the International Care Labelling Code. The sewing thread, washability and shrinkage of linings and interlinings must not be forgotten. When bulk ordering of a new garment is considered, a trial item should be put through the laundry or dry cleaning process.

1350. MORGAN, D. M. **Luxurious living at Meadow Park.** *Dimensions in Health Service*, Toronto, 1977, April, vol. 54, no. 4, pp. 28-30.

Meadow Park Nursing Home, Ontario, is sited on a 5½ acre plot and consists of two resident wings of 28 and 32 beds spreading out on each side from a central area

which houses a small lobby, an office for the director of nursing and a single-room infirmary. There are large plate glass windows built into the walls rising to a height of two storeys to bring the outside view into the nursing home. At each end of the two resident wings is a sitting-room for residents, glassed in on two sides. The internal design and structure of the nursing home is outlined. Future plans include a day centre for chronically ill patients and a physiotherapy department. The services provided are outlined. Patients are classified in the Parachek geriatric rating scale designed to help staff plan treatment schemes. Volunteers are welcomed from the community. The nursing home has a good reputation since every effort is made to ensure that each patient receives excellent nursing care, good food and living conditions to maintain a healthy outlook on life.

1351. BOWMAN, G. **Wakerley Lodge: encouragement to living.** *Nursing Times*, London, 1977, May 12, vol. 73, no. 19, pp. 691-692.

Wakerley Lodge is a 26-bed unit purpose-built for the younger chronic sick in the grounds of Leicester General Hospital. The unit, opened in 1975, has 12 long-stay, eight medium-stay and six holiday relief beds. In this series of papers an occupational therapist, two nurses, a physiotherapist, the clinical psychologist and the consultant neurologist on the unit's staff and two patients describe how they have worked together over the past 18 months to create a happy and purposeful home.

1352. CLARK, J. **Authority patterns in nursing management structures.** *Nursing Times*, London, 1977, May 12, vol. 73, no. 19, occasional papers, pp. 65-68.

Management structures and authority patterns in the health service in general and in nursing in particular have been much criticized but on the whole little studied. The conflict between professionalism and bureaucracy, the operation of officially prescribed structures and processes, and the existence of intra-organizational variations are areas of major importance to the management of nursing services, and it therefore seemed useful to try to relate some of the studies of these problems undertaken in other organizations to the nursing situation. Using Hall's analysis of intra-organizational variation, two hypotheses were formulated: (i) that there would be differences in the degree to which the hierarchy in authority dimension of bureaucracy was exhibited by the nursing organization in a central hospital unit, a peripheral hospital and the community nursing services; and (ii) that nurses occupying higher levels in the hierarchy would exhibit this dimension to a lesser degree than nurses occupying lower levels. Data were collected using a two-part questionnaire, which was completed by 75 nurses in one health district. The results are presented in five tables and discussed. In spite of its small scale and lack of rigour in sampling, the study revealed a number of interesting facets of authority patterns in nursing organization which tend to confirm anecdotal evidence. It also showed that an instrument originally developed in an industrial organization can also be used in professional organizations.

CANCER

1353. MCINTOSH, J. **Communication and awareness in a cancer ward.** London, Croom Helm, 1977, 210 pp. £6.95

The problem of communication between cancer patients and their doctors has

been a matter of concern for decades. This book is a study of interactions in a cancer ward over a period of a year and describes and attempts to explain the process of communication within one hospital. It considers patients with diagnosed but undisclosed malignancy, their awareness, desire for information and efforts to obtain it, and the ways in which the medical and nursing staff attempted to control the information which they received. The process of communication and patterns of adaptation developed during the course of the patient's stay in hospital are examined. The role of the relatives in the communication process is also discussed. A bibliography of 49 items is included.

NEUROLOGY AND NEUROSURGERY

See also Abstract No. 1332

1354. RILEY, M. and MOSES, J. A. **Coordinated care: making it a reality.** *Journal of Nursing Administration*, Wakefield, 1977, April, vol. 7, no. 4, pp. 21-25.

A survey of patient care at Veterans Administration Hospital, Palo Alto, Calif., identified four major problems: significant depersonalization, gaps in continuity of care, a serious lack of interdisciplinary communication, and a certain amount of provider-use antagonism. As a result, a co-ordinated care (Co-care) programme was developed: a care team works in co-operation with the patient's primary physician to provide interdisciplinary co-ordination and continuity of care for patients disabled by neurological catastrophe. The nurse co-ordinator holds a private position on the Co-Care team. Details are given of the guidelines developed for the three progressive treatment phases: acute, post-acute and pre-discharge.

CARDIOLOGY

See Abstract No. 1337

UROLOGY

See Abstract Nos. 1333-1335

MATERNITY

See Abstract No. 1284

OPHTHALMOLOGY

1355. ASSISTANCE PUBLI$UE DE PARIS. Ophtalmologie: études des besoins et projet de programme. **[Ophthalmology: a study of requirements and planned programme.]** *Hôpital à Paris*, Paris, 1977, Jan./Feb., no. 37, supplement, pp. 3-23.

The number of beds required for ophthalmological services in the Parisian region in the period 1980-1985 was estimated on the basis of an analysis of the numbers and types of admissions between 1969 and 1973. Whereas the number of cases of strabismus and of ocular inflammations and injuries is fairly constant, the numbers of admissions

for the treatment of degenerative lesions have risen, due partly to the development of new medical and surgical techniques. A total of 1,000 to 1,100 beds will be required; at the moment there are 1,021 beds, of which the Assistance Publique has 38 per cent. There should be an out-patient department in every hospital, but the 400-440 beds required by the public hospitals should be spread over six to seven hospitals, each having 60 to 70 beds. The establishment of an insitute of ophthalmology for highly specialized treatment and research, and having 150 beds, is recommended. The detailed distribution of the existing beds is described and proposals are made for redistribution and expansion. The report includes five graphs and 15 tables and there is an annexe which deals with the siting of argon laser photocoagulators in public hospitals in the region.

PSYCHIATRY

See also Abstract Nos. 1258, 1260-1263, 1335, 1336, 1341

1356. KARASU, T. B. and others. **Patterns of psychiatric consultation in a general hospital.** *Hospital & Community Psychiatry*, Washington, 1977, April, vol. 28, no. 4, pp. 291-294.

This study of psychiatric consultation sought by non-psychiatric patients was carried out in the Jacobi and Van Etten Hospitals, part of the Bronx Municipal Hospital Centre and representing 1,200 beds. The 151 patients who required psychiatric help ranged in age from 15 to 83 years, with a mean of 43, and the 20 to 29 age group contained the highest proportion of patients of both sexes. Forty per cent of the patients were on general medical wards and 16 per cent on surgical wards. The highest ratio of patients consulted to patients admitted, occurred in the rehabilitation and the plastic surgery departments, where loss of function through accidents and burns is likely to require psychological readjustment. Males made up the larger proportion of patients seen and depression was the major problem among patients of both sexes. Continued psychiatric care was arranged for over 50 per cent of the patients while they were still in hospital, and for 18 per cent as out-patients. Detailed results are shown in four tables.

1357. MENDELSOHN, R. and HARMATZ, M. G. **Length of stay and behavior patterns of hospitalized schizophrenics.** *Hospital & Community Psychiatry*, Washington, 1977, April, vol. 28, no. 4, pp. 273-277.

This study aims to assess the relationship between behaviour patterns and the length of hospital stay in 42 male schizophrenic patients at the Northampton, Mass., Veterans Administration Hospital. The patients were divided into four groups according to length of stay. Each patient was observed on his ward for ten sessions of ten minutes each and his behaviour was recorded using the behavioural observation system. The findings showed clearly that long-term patients (that is, those in hospital for over eight years) showed more negative and pathological behaviour and less social and functional behaviour than the short-term patients. Lack of involvement increased with hospital stay and those most active were in the four months to one year length of stay group. It would appear, therefore, that a period in hospital of up to one year is beneficial to the schizophrenic patient, but over a longer period the disadvantages outweigh the benefits. Results are shown in three tables.

1358. PHILIPZEN, H. and others. Aufbau eines dezentralisierten Systems zur Versorgung psychisch Kranker in einer Region. **[Organization of a decentralised regional system for the care of psychiatric patients.]** *Psychiatrische Praxis*, Stuttgart, 1977, Feb., vol. 4, no. 1, pp. 3-14.

The system of decentralized psychiatric care described, was set up in a thinly-populated rural area of Höxter, Western Germany, in 1968. It includes a clinical unit fully integrated into a general hospital, an out-patient service in social psychiatry incorporated in an advice centre covering other advisory services, and a system of sheltered workshops in which an attempt is made to carry out phased rehabilitation under conditions simulating the normal industrial environment. The provisions made for the treatment and care of drug addicts and psycho-geriatric patients are also outlined. The paper is illustrated with a number of charts, diagrams and statistical tables.

1359. PIERCE, D. J. **Achieving code compliance and project goals is possible.** *Hospitals*, Chicago, 1977, Feb. 1, vol. 51, no.3, pp. 107-108, 113-114.

No human care facility can be designed without a major pattern of the planning and design time being devoted to a consideration of regulations and codes. The need for architects to spend more time interpreting codes is in their own and their clients' best interests. The Porter-Starke Community Mental Health Center, Valparaiso, Ind., is a two-storey building serving an area of 110,000 people with a staff of 74. Once the appropriate building codes and regulations concerned with community mental health centres are identified they become part of the design process together with the other requirements specified by the client in the building programme. The general circulation needs of a community mental health centre more ready resemble those of a hotel than a hospital, but the architect must provide eight-foot corridors following the institutional occupancy regulations. The Porter-Starke building makes use of these wide corridors by abutting other spaces on to them. Circulation is planned to promote as much social interaction as possible between patient and therapist. The interior design of the centre is outlined; the use of finish materials is determined by the codes. The various problems involved in considering the design and construction details are outlined. The need for the architect and client to get to know the agencies that regulate their projects and to make each agency aware of and familiar with the project as it develops so that the agency's role becomes more that of a contributor rather than an adversary is emphasised.

1360. GOODWIN, J. C. and ANTHONY, W. P. **The post-release adjustment of mental health patients under an early release program.** *Canadian Journal of Public Health*, Ottawa, 1977, Jan./Feb., vol. 68, no. 1, pp. 51-54.

One type of community-based psychiatric treatment involves releasing patients to the care of their family, other relatives, or a guardian on a trial visit basis. If there are no significant problems for one year, the patient is automatically discharged from the hospital. This paper describes a preliminary evaluation of a trial visit programme in Florida. A sample of 100 patients released under the trial visit programme was compared with a control group of 100 patients released under other procedures. Significant differences between the groups were noted on only two of the dependent

variables—current employment status and average weekly salary. In both cases individuals in the control groups fared better than those in the trial visit group. These differences could be explained by differences that exist between the two groups on the independent variables.

1361. KIRK, S. A. **Who gets aftercare? A study of patients discharged from state hospitals in Kentucky.** *Hospital and Community Psychiatry*, Washington, 1977, Feb., vol. 28, no. 2, pp. 109-114.

A group of 579 patients discharged from psychiatric hospitals in Kentucky was studied to determine the amount of after-care received. Of the 579 patients, 319 received some form of after-care, 36 per cent being seen on three or fewer occasions and 50 per cent on no more than seven occasions. The remaining patients had up to 379 after-care visits, although 90 per cent had fewer than 53 visits during the two to three years after discharge. The most common services provided by the psychiatric health centre were individual therapy and drug therapy. Only a small percentage received family interviews, group therapy or rehabilitation. Patients who had had the longest stays in hospital tended to have more after-care visits, and those who were referred to the hospital by their families or by health centres were more likely to ask for after-care than those who had been admitted involuntarily.

1362. WOOLLEY, F. R. and KANE, R. L. **Community aftercare of patients discharged from Utah state hospital: a follow-up study.** *Hospital and Community Psychiatry*, Washington, 1977, Feb., vol. 28, no. 2, pp. 115-117.

A sample of patients discharged from Utah State Hospital during 1973 and 1974 was studied to find out whether they were following recommended courses of after-care treatment. Of the 143 patients studied, 125 should have received after-care services from a community mental health centre. A review of community mental health centre records and interviews with the patients indicated that only 100 actually had contact with a centre. Only 43 of the patients were still receiving after-care services in the summer of 1975.

1363. HENDERSON, M. **The magic ingredient for success in a therapeutic community.** *Health and Social Service Journal*, London, 1977, May 20, vol. 87, no. 4542, pp. 826-828.

Dingleton Hospital, near Melrose is the only psychiatric hospital in the Borders region, but with the development of a community-based mental health service, encouraged by Dingleton, its psychiatric admission ward has been reduced to ten beds. New patients are not expected to stay more than four weeks and some self-caring units and houses are available, leaving a preponderance of elderly patients within the hospital. With its policy of patient participation at all levels, Dingleton attracts 1,000 foreign visitors a year. A meeting of the management team is held daily and the Community Council, open to staff and patients, meets four times weekly, with one meeting especially for patients. In addition, each ward has its own daily meeting. There are also 'sensitivity' meetings for staff to discuss grievances or particular causes of stress. The social therapists, a group of young people considering a career in mental health, supervise and stimulate activities and work closely with the occu-

pational therapist and the dance movement therapist. A separate house provides a 20-bed unit for mentally handicapped adults and there is also a recently opened unit for elderly, non mentally handicapped patients recuperating from physical illness.

1364. SWINT, J. M. and NELSON, W. B. **The application of economic analysis to evaluation of alcoholism rehabilitation programs.** *Inquiry*, Chicago, 1977, March, vol. 14, no. 1, pp. 63-72.

The classic principles of cost-benefit analysis are reviewed briefly and the economic costs of alcoholism are listed. It is then assumed that a health planning agency is given a proposal for an alcoholism rehabilitation clinic serving out-patients only. Details of the clinic's programme and staff are outlined and its costs and benefits assessed. An algorithm is presented designed to facilitate the application of economic analysis to the evaluation of the programme. The authors have attempted to delineate the limitations of such analyses as well as the type and value of information they provide.

1365. WEYMAN, A. **Maximising care potential.** *Health and Social Service Journal*, London, 1977, May 20, vol. 87, no. 4542, p. 829.

The Marlborough Day Hospital in St. John's Wood, London, has three main departments: (i) a therapeutic community; (ii) a family day unit; and (iii) an out-patients department. The therapeutic community provides treatment, usually on a daily basis, for 32 mostly young patients and serves a wider area than the local health district. The family day unit works with whole families with children under 13 and the out-patient department provides psychotherapy for local people. The Marlborough 'NW8' project answers emergency calls from local referral agencies and visits patients at home within 48 hours. It serves a catchment area of 30,000 and has six beds available to it in the hospital, providing a daily programme aimed at getting patients back to their normal lives as quickly as possible.

1366. SHIRES, J. **A travelling day hospital: an experiment in rural community psychiatric care.** *Social Work Today*, Birmingham, 1977, March 22, vol. 8, no. 24, pp. 16-18.

The idea of a travelling day hospital was devised as a novel way to provide for the estimated need for a further 53 day hospital places in West Dorset. The alternative idea of extending the existing day hospital and transporting rural patients to it had proved impractical. A pilot scheme began in Bridport in October 1974, providing a day hospital for 1½ days a week. This paper describes how the scheme, originally devised as a 'second best', has produced a style of service with advantages and implications beyond the solution of the problem originally posed, and in spite of only minimum financial outlay. The pilot project is now complete and indicates: (i) the effectiveness of a small, flexible, relatively administration-free team, based on a limited geographical area; (ii) the need for day care beyond Department of Health and Social Security estimates, and the value of this in the patients' familiar, local surroundings; (iii) a few sessions in suitable existing premises can foster a non-institutional type of work which has value beyond more elaborate provision; (iv) some admissions to hospital can be avoided or curtailed; (v) members of a team with varying professional backgrounds can develop skills in a small team which fosters innovation, does not

prescribe treatment procedures, and minimizes roles; and (vi) the sessional day centre can provide better opportunity for direct immediate communication between all concerned than can the psychiatric hospital.

1367. MILNE, J. S. and ROBINSON, R. A. **New referrals during one year to a psychiatric service for the elderly.** *Health Bulletin*, Edinburgh, 1977, March, vol. 35, no. 2, pp. 84-88.

The 247 patients studied were all new patients referred to the psychiatric unit at the Royal Victoria Hospital, Edinburgh, between July 1973 and June 1974, the majority being drawn from the elderly population of north Edinburgh. The most frequently referred patients were widowed or single women in their early 80's. One third of the patients were interviewed initially in their own homes, and just over half were either admitted to the assessment unit or attended the psychiatric day hospital. The commonest diagnoses were organic brain syndrome (60 per cent) and affective disorders (24 per cent). Of the 113 discharged patients, 41 per cent returned to private homes and 26.6 per cent went to long-stay psychiatric beds, as did 56 per cent of those attending the day hospital. Nearly all those requiring long-stay had brain damage; geriatric functional cases rarely need long-stay care. Detailed results are given in eight tables.

1368. WEBSTER, R. C. **Mental handicap today.** *Royal Society of Health Journal*, London, 1977, April, vol. 97, no. 2, pp. 64-66.

This paper traces advances in the care and treatment of the mentally handicapped over the last half century, with particular reference to intelligence tests, therapeutics, training centres and hospitals. In spite of the development of community care, hospitals are still needed on physical, rather than mental grounds. The hospital setting has indeed positive advantages for the more severely handicapped; it can provide a work environment and entertainment, and becomes in effect a sheltered village. Although almost all hospitals for the mentally handicapped were built many years ago, there have been many improvements inside them. Running costs of hostels vary considerably, but they have certain inherent factors which make them more costly than hospitals. It is not suggested that the hospitals, modified and updated, are the best or only solution for the mentally handicapped; rather that the patients should be treated as individuals and that for each the measures to be recommended must be based on the fullest assessment of their needs and potential.

1369. FRASER, W. and others. **The first eight years of a mental handicap service.** *Health Bulletin*, Edinburgh, 1977, March, vol. 35, no. 2, pp. 66-70.

Lynebank Hospital, Dunfermline, opened in 1968, provides intermediate and long-term care to mentally handicapped people and serves the catchment area of Fife. The major emphasis is on providing a wide variety of services for all ages. These include a special teaching unit for 122 children, language clinics, a sophisticated psychology service, physiotherapy, and dental and chiropody clinics. Every patient over 16 years of age attends the industrial therapy unit or is the responsibility of the social department, thereby giving the patient a change of environment and easing the burden on the nursing staff. The creation of an environment in which to help the severely retarded requiries a specialized staff trained in behaviour management and

able to plan a programme of rehabilitation and activities. Involvement with community care, to which it is hoped some patients will return, is maintained through the out-patient department, adult training centres and schemes to train parents in behaviour management.

1370. GREEN, A. M. **Some factors relating to the effectiveness of improved physical environment and normalising training programmes in hospitals for the mentally handicapped.** *REAP*, Amsterdam, 1976, vol. 2, no. 3, pp. 176-192.

This study aimed to make an appraisal of the effect of improved physical environment, combined with social training, upon the social competence of psychiatric patients in two large psychiatric hospitals. Living units of five types were selected: (i) Unit A, an open-plan unit for 30 reasonably independent, adult males with no systematic training programme; (ii) Unit B, a large house accommodating five children with a structured training programme; (iii) Unit C, a similar house for nine female patients of varying stability providing a training in running their own homes; and (iv) Units D and E, medium-sized houses each accommodating 15 patients, D for females and E for males, both providing similar social training programmes. Changes in the social competence of the patients were investigated during their stay in the new living and training conditions. Improvement in skills took place in all units except E, where there was in fact less room for improvement at the outset than among the patients in Unit D. While variables of staff ability and the age and sex of the patients have to be considered, it would seem that a combination of a home-like environment and home-based training contributes more to the social competence of the mentally handicapped patient than the alternative of separate home and training backgrounds.

1371. GORMAN, V. **Caring for the future.** *Health and Social Service Journal*, London, 1977, June 17, vol. 87, no. 4545, p. 930.

Sectorization of hospital services for the mentally handicapped, which was recommended in 1971, has been facilitated by reorganization. Sectorization would have the following advantages: (i) it would provide a basis for establishing link teams; (ii) sector staff would have far fewer community workers to relate to and much closer liaison would result; (iii) similarly community workers would have fewer hospital staff to relate to; (iv) each link-team and the villa-based nurses could hold their own case conferences; (v) residents would only move within their own sector; (vi) it should lead to a more personalized service to the patient; (vii) it would be more feasible to organize joint in-service staff training; (viii) hospital staff would have a major say in the development of community services; and (ix) it would be possible to identify cost and evaluate the residential and 'outreach' services provided to clients from each area. There are no apparent disadvantages to the principle of sectorization, but its application in an existing hospital would involve moving many patients from the familiar surroundings of their present home. However, in the long-term it should allow the development and motivation of friendships between patients from the same area.

1372. KNIGHT, L. **Why the patients want St. Wulstan's.** *Community Care*, Sutton, 1977, May 18, no. 162, pp. 19-21.

Since 1961 St. Wulstan's Hospital, Malvern, has been the only specialist rehabilitation hospital for psychiatric patients in Great Britain. Closure of the hospital has been

under consideration since 1972 and three months ago West Midlands Regional Health Authority produced a consultation document on the proposed closure. The proposals have met with strong opposition, but also with some support. This paper reviews the work and record of the hospital and discusses the arguments for and against the closure.

1373. MARTINDALE, D. and MARTINDALE, E. **The social dimensions of mental illness, alcoholism, and drug dependence.** Westport, Conn., & London, Greenwood Press, 1976, xvi, 331pp. £3.95

This book reviews the nature and extent of the problems of mental illness, alcoholism and drug dependence, mainly in the United States, and discusses the therapeutic procedures to deal with them. After a survey of the size of the existing problem of mental illness separate chapters cover the legal position, the organization of the mental hospital, the career of the mental patient and treatment methods. There are separate sections on alcoholism and drug dependence, and a concluding chapter emphasizes the importance of social factors in problems of mental illness. A bibliography is included.

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